PB88-197470

National Air Toxics Information Clearinghouse NATICH Data Base Users Guide for Data Viewing, February 1988

Radian Corp., Austin, TX

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

27 Jan 88

U.S. Department of Commerce
National Technical Information Service

BIBLIOGRAPHIC INFORMATION

PB88-197470

National Air Toxics Information Clearinghouse: NATICH Data Base Users Guide for Data Viewing, February 1988,

27 Jan 88

by S. A. Smith.

PERFORMER: Radian Corp., Austin, TX.
Contract EPA-68-02-4330

SPONSOR: Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.
EPA/450/588/002

See also PB86-123601, and PB88-202734. Sponsored by Environmental Protection Agency, Research Triangle Park, NC. Office of Air Quality Planning and Standards.

Contents: The national air toxics information clearinghouse (The clearinghouse, The NATICH data base, Data collection, Obtaining information from NATICH, Using this guide); Access to the NATICH data base (Hardware and software requirements, Authorization to logon, Logon procedures, Logoff procedures, If you have a problem); Overview of the interactive data viewing system (Contents of the data base, Menu structure, Report programs); Selected report programs (Agency reports, Pollutant reports, Source reports, Bibliographic citations and ongoing research, Risk analysis reports, Permitting information reports).

KEYWORDS: *Air pollution control, *Manuals, *Information systems, *National Air Toxics Information Clearinghouse Data Base, *User manuals(Computer programs), *Toxic substances.

Available from the National Technical Information Service, SPRINGFIELD, VA. 22161

PRICE CODE: PC A06/MF A01

PB88-197470

NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE

EPA Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

STAPPA / ALAPCO State and Territorial Air Pollution Program Administrators
Association of Local Air Pollution Control Officials

NATICH Data Base Users Guide for Data Viewing

February 1988

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
SPRINGFIELD, VA. 22161

EPA Contract 68-02-4330
Work Assignment 37
DCN: 88-239-001-37-08
EPA-450/5-88-002

NATIONAL AIR TOXICS

INFORMATION CLEARINGHOUSE

NATICH DATA BASE

USERS GUIDE FOR DATA VIEWING

Prepared for:

John Vandenberg, Work Assignment Manager
Pollutant Assessment Branch, MD-13
Office of Air Quality and Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

Prepared by:

Sandra A. Smith
Radian Corporation
P.O. Box 201088
Austin, Texas 78720-1088

27 January 1988

TABLE OF CONTENTS:

		Page
SECTION 1	THE NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE. . .	1-1
	The Clearinghouse	1-1
	The NATICH Data Base	1-3
	Data Collection	1-4
	Obtaining Information from NATICH	1-4
	Using This Guide	1-5
SECTION 2	ACCESS TO THE NATICH DATA BASE	2-1
	Hardware and Software Requirements	2-1
	Authorization to Logon	2-1
	Logon Procedures	2-3
	Logoff Procedures	2-5
	If You Have A Problem	2-5
SECTION 3	OVERVIEW OF THE INTERACTIVE DATA VIEWING SYSTEM. . .	3-1
	Contents of the Data Base	3-1
	Menu Structure	3-6
	Report Programs	3-9
SECTION 4	SELECTED REPORT PROGRAMS	4-1
	Agency Reports	4-1
	Pollutant Reports	4-16
	Source Reports	4-25
	Bibliographic Citations and Ongoing Research	4-32
	Risk Analysis Reports	4-41
	Permitting Information Reports	4-48
APPENDIX A - IF YOU HAVE A PROBLEM		
APPENDIX B - KEYBOARD USAGE		
APPENDIX C - AGENCY ACRONYMS		
APPENDIX D - CLEARINGHOUSE IDENTIFIERS FOR CHEMICAL GROUPS		
APPENDIX E - SIC CODES AND INDUSTRY DESCRIPTIONS		

LIST OF FIGURES

		Page
1.	NATICH Interactive Data Viewing System - Menu Structure. . .	3-7
2.	Example Data Screen Showing Agency Name, Address, Phone #, and Contacts for a Selected Agency	4-4
3.	Example Data Screen Showing Methods Development Activities for a Selected Agency.	4-6
4.	Example Data Screen Listing Agencies That Have Submitted Selected Methods Development Activity Information	4-8
5.	Example Data Screen Showing Air Toxics Emissions Inventory Information for a Selected Agency.	4-10
6.	Example Selection Screen to Select Agencies By Emissions Inventory Characteristics.	4-12
7.	Example Data Screen Listing Agencies That Exhibit Selected Emissions Inventory Characteristics.	4-13
8.	Example Data Screen Showing Emissions Inventory Data for a Selected Agency.	4-14
9.	Example Data Screen Showing Acceptable Ambient Concentrations, Units, and Averaging Times for a Selected Pollutant .	4-20
10.	Example Data Screen Showing Acceptable Ambient Concentration Bases, Sources, and Uncertainty Factors for a Selected Pollutant	4-21
11.	Example Data Screen Showing Pollutant Research Data for a Selected Pollutant	4-23
12.	Example Data Screen Listing Source Tests for a Selected Pollutant	4-28
13.	Example Data Screen Describing a Selected Source Test . . .	4-29
14.	Example Data Screen Showing Pollutant-Specific Information for a Selected Source Test.	4-31
15.	Example Search Criteria Screen for the Bibliographic Citations and Ongoing Research Report	4-33
16.	Example Summary Screen for the Bibliographic Citations and Ongoing Research Report	4-36

LIST OF FIGURES

		Page
17.	Example Data Screen Showing a Bibliographic Citation for a Published Document.	4-38
18.	Example Data Screen Showing an Abstract for a Published Document.	4-39
19.	Example Data Screen Showing a Description of an Ongoing Research Project.	4-40
20.	Example Data Screen Showing EPA Risk Analysis Information for a Selected Pollutant.	4-44
21.	Example Data Screen Showing EPA Risk Analysis Information For a Selected SIC Code	4-45
22.	Example Data Screen Showing EPA Risk Analysis Information For a Selected State.	4-47
23.	Example Search Criteria Screen for the Permitting Information Report.	4-50
24.	Example Data Screen Showing Permitting Information for Selected Search Criteria.	4-52
25.	Example Data Screen Describing a Selected Permit.	4-53
26.	Example Data Screen Showing Pollutant-Specific Information for a Selected Permit.	4-55

LIST OF TABLES

		Page
1.	NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE PUBLICATIONS.	1-2
2.	EPA REGIONAL OFFICE AIR TOXICS CONTACTS	1-6
3.	SUMMARY OF DATA CONTAINED IN THE NATICH DATA BASE	3-2
4.	SUMMARY OF NATICH INTERACTIVE REPORT PROGRAMS	3-10
5.	REFERENCE TYPES AND SPONSORS.	4-35

SECTION 1

THE NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE

THE CLEARINGHOUSE

The U.S. Environmental Protection Agency (EPA) and the State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) jointly established the National Air Toxics Information Clearinghouse to support State and local agency efforts to control toxic air pollutants. The Clearinghouse is designed to make it easier for Federal, State, and local agencies to exchange information about air toxics and to develop and operate air toxics control programs.

The primary purpose of the Clearinghouse is to collect, classify, and disseminate air toxics information provided by State and local air agencies, EPA, and other Federal and International agencies. Clearinghouse information is distributed in these ways:

- Bimonthly newsletters containing information on State, local and Federal air toxics programs and activities, research, agency case histories, etc.;
- Special reports on specific air toxics issues;
- A computerized data base;
- Hardcopy reports of data contained in the data base issued on a regular schedule;
- Response to requests for specific information; and
- National workshops and seminars.

Table 1 provides a list of Clearinghouse publications issued as of February 1988. All reports are available free of charge to State and local agencies through the Clearinghouse [(919) 541-0850, FTS 629-0850]. The newsletter is available free of charge to State and local agencies and the general public through the Clearinghouse as well. The private sector may purchase reports from the National Technical Information Service at (703) 487-4650, or from Radian Corporation at (512) 454-4797, ext. 5224.

TABLE 1. NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE PUBLICATIONS

Title[1]	Publication Date
National Air Toxics Information Clearinghouse Newsletters	Bimonthly
Bibliography of Selected Reports and Federal Register Notices Related to Air Toxics EPA-450/5-87-005 NTIS: 88 136601 (Vol I) and NTIS: 88 136593 (Vol II)	July 1987[2]
Ongoing Research and Regulatory Development Projects EPA-450/5-87-004 NTIS: PB88 113196/AS	June 1987[2]
NATICH Data Base Report on State, Local, and EPA Air Toxics Activities EPA-450/5-87-006 NTIS: PB88 113428/AS	July 1987[2]
Rationale for Air Toxics Control in Seven State and Local Agencies EPA-450/5-86-005 NTIS: PB86 181179/AS	August 1985
NATICH: How the Clearinghouse Can Help to Answer Your Air Toxics Questions EPA-450/5-86-009	July 1986
Methods for Pollutant Selection and Prioritization EPA-450/5-86-010 NTIS: PB87 124079/AS	July 1986
NATICH: Qualitative and Quantitative Carcinogenic Risk Assessment EPA-450/5-87-003 NTIS: PB88 113188/AS	June 1987
NATICH Data Base Users Guide for Data Viewing EPA-450/5-88-002 NTIS: To be Determined	February 1988
NATICH Data Base Users Guide for Data Entry and Editing EPA-450/5-88-001 NTIS: To be Determined	February 1988

[1]All titles begin with "Air Toxics Information Clearinghouse" or "National Air Toxics Information Clearinghouse."

[2]These reports are published annually.

THE NATICH DATA BASE

A computer data base (NATICH) forms the core of the Clearinghouse. The data base resides on the EPA National Computer Center's IBM mainframe computer and is designed for easy access and data retrieval. It contains all of the information collected from State and local agencies on their air toxics activities as well as bibliographic and research information from EPA and other organizations. Information collected from State and local agencies includes the following:

- State and local air toxics contacts;
- Regulatory program descriptions;
- Acceptable ambient concentration guidelines and standards;
- Pollutant research and methods development activities;
- Non-health related impacts;
- Permitting data;
- Ambient air monitoring information;
- Source test data;
- Emissions inventory information;
- Agency publications and documents; and
- Ongoing research and regulatory development projects.

State and local agencies do not submit confidential business information about sources in their jurisdictions.

The NATICH data base also contains information collected from EPA and other Federal and International organizations on their ongoing research and regulatory development projects and bibliographic citations/abstracts for published documents. Information provided by EPA includes selected EPA risk analysis information as well.

The information in the data base is generally indexed according to agency, pollutant, and type of emission source. Using your agency's microcomputer or minicomputer, a modem and emulator package, you can have interactive viewing access to all data base information via a series of easy to use menus which appear on your screen. The menus direct you to answers to questions such as: "Which agencies have regulated acrylonitrile?" and "What pollutants have been found through source

tests to be emitted from municipal incinerators?". Answers to these and hundreds of other questions can be obtained quickly, easily, and inexpensively.

DATA COLLECTION

The Clearinghouse collects information in several ways, including an annual information request from State and local agencies, and an annual Federal and International survey of ongoing research and published air toxics information. State and local agencies can submit information to the data base in three ways: (1) by completing and returning the NATICH data collection forms; (2) by transferring information from agency computer files to the NATICH data base via magnetic tape or diskette[1]; and (3) by directly accessing NATICH data entry and editing programs[2]. To protect system security, agencies are allowed data entry access only to data for their agency. The Clearinghouse welcomes and encourages the submission of data collection forms, the transfer of computer files, and direct data entry and editing by State and local agencies to maintain the currency of the information in the data base on State and local air toxics activities.

OBTAINING INFORMATION FROM NATICH

You can obtain information from the NATICH data base in three ways: (1) through direct computer access; (2) from hardcopy reports; and (3) by requesting information from EPA regional contacts or the Clearinghouse staff. With a microcomputer or minicomputer, a modem, and an emulator package, you can have interactive viewing access to all data base information. Interactive access means that you can ask questions of the data base and receive answers via your computer terminal.

If you do not have access to a computer, you can consult the regularly-issued hardcopy reports of data contained in the data base (see Table 1). In addition,

---

[1] If you have information contained in computer files that could be transferred by computer, please call Ed Brown, Radian Corporation, (512) 454-4797.

[2] For a copy of NATICH Data Base Users Guide for Data Entry and Editing, please call the Clearinghouse staff [(919) 541-0850, FTS 629-0850] or Radian Corporation, (512) 454-4797, ext. 5224.

you can call the EPA Regional Office air toxics contacts listed in Table 2 and they can obtain data base information for you.

USING THIS GUIDE

This Users Guide was prepared to help you access and use the NATICH data viewing programs to obtain information directly from the data base. Section 2 of this guide specifies the hardware and software you will need to access the data base, describes how to gain authority for interactive viewing access to the data, and provides step-by-step logon and logoff instructions. Section 3 provides an overview of how the interactive data viewing system works and includes a concise summary of each available report program. Section 4 guides you through selected report programs with step-by-step instructions and figures showing actual screens of data from the data base.

Additional guidance on solving miscellaneous problems, the use of the keyboard, and information to help you select and interpret information in the data base can be found in the appendices.

Appendix A describes several common problems which you may encounter in accessing and using the data base, such as your keyboard becoming locked or the cursor moving outside a defined field, and offers solutions to these problems. It also lists who to contact if a problem should persist or for guidance on problems not described in the appendix.

Appendix B provides guidance on certain keyboard functions important to the NATICH data base. In general, the characters, numbers, or function keys you need to use to retrieve information from the data base are fairly limited. A long pollutant name may be the largest number of characters you need to enter at any one time. However, should you encounter some difficulty with keyboard usage, consult this appendix.

Appendix C lists the State and local agencies that have submitted information to the data base and their acronyms. The agency acronym is included in many of the viewing displays instead of the full name of the agency; therefore, you should

TABLE 2. EPA REGIONAL OFFICE AIR TOXICS CONTACTS

Region	Contact	
I	Margaret McDonough (617) 565-3231	FTS 835-3231
	Sarah Levinson (617) 565-3232	FTS 835-3232
II	Bob Kelly (212) 264-2517	FTS 264-2517
III	Iz Milner (215) 597-9090	FTS 597-9090
IV	Sharon Porter (404) 881-2864	FTS 257-2864
V	Harriet Croke (312) 353-6009	FTS 353-6009
VI	Jill Lyons (214) 655-7208	FTS 255-7208
VII	Wayne Kaiser (913) 236-2893	FTS 757-2893
VIII	Dewitt Baulch (303) 293-1761	FTS 564-1761
IX	Kathy Diehl (415) 974-8381	FTS 454-8381
X	Dave Kircher (206) 442-4198	FTS 399-4198

familiarize yourself with the acronyms or keep a reference copy of the list handy. Generally, the acronym consists simply of the two-letter State abbreviation for the State agencies. For the local agencies, an abbreviation for the city, county, or local district name is added to the two-letter State abbreviation. For example, the acronym for the Bureau of Air Quality Control for the State of Pennsylvania is PA. The acronym for Air Management Services for the city of Philadelphia is PA-PHIL.

Pollutants are identified in the data base by their Chemical Abstracts Service (CAS) number. The CAS number is a unique number assigned to chemicals by the American Chemical Society CAS Registry System. The CAS numbers are independent of nomenclature and have no chemical significance. They are assigned as each new chemical enters the CAS Registry System. Groups of chemicals or pollutants such as "organic compounds" that cannot be identified more precisely by a CAS number have been assigned unique Clearinghouse identifiers in the place of CAS numbers. Appendix D lists the Clearinghouse identifiers for chemical groups included in the data base. The identifier consists of some combination of letters which abbreviates the chemical group name, prefixed by CL (for Clearinghouse). The Clearinghouse identifiers are therefore easily distinguished from CAS numbers which are entirely numeric. For example, the Clearinghouse identifier for chlorinated hydrocarbons, for which there is no CAS number, is CL-CHC.

Sources are categorized in the data base by their Standard Industrial Classification Codes (SIC Codes). Appendix E presents a complete list of SIC Codes and corresponding short titles for a comprehensive range of economic activities. The SIC Code was developed by the Federal government (U.S. Department of Commerce) for use in the classification of establishments by type of activity in which they are engaged. The classification is structured on a hierarchical two-digit, three-digit, and four-digit industry code basis, according to the level of industry detail. The two-digit number stands for the major industrial group (e.g., primary metal industries), the three-digit number for the group (e.g., primary nonferrous metals) and the four-digit number for the industry (e.g., primary aluminum).

SECTION 2

ACCESS TO THE NATICH DATA BASE

HARDWARE AND SOFTWARE REQUIREMENTS

To directly access the NATICH data base you will need a computer, modem, and a VT100 ANSI full-screen emulator package such as Crosstalk® or Smarterm®[1]. The emulator package allows your computer to communicate with the EPA computer.

To communicate with the NATICH data base, set up the following communications parameters (if you have a full screen VT100 emulation package):

- 1200 baud rate[2];
- Even parity;
- Full duplex;
- Seven data bits;
- One stop bit; and
- VT100 emulation.

Keep in mind that some specific procedures such as configuring your equipment to communicate with the data base will depend on your particular computer, modem, and emulator package.

AUTHORIZATION TO LOGON

State and Local Agencies

To gain authority for interactive data viewing, you must set up an account with EPA. You will want set up one account for each user. To do so:

1. Call or write your EPA Regional Office air toxics contact (see Table 2) and request authorization to log onto NATICH. You will receive by mail a User ID, an account name, and an initial password from the EPA National Computer Center (NCC).

---

[1]Use of trade names does not constitute an endorsement by EPA or STAPPA/ALAPCO. Numerous terminals also can be used. Call EPA Telecommunications at (800) 334-0744 for details.

[2]Higher baud rates can be used, but the logon procedures will differ. If you have the equipment to use a higher baud rate, contact the Clearinghouse Staff at (919) 541-0850 or FTS 629-0850 to determine appropriate logon procedures.

2. Call EPA Telecommunications at (800) 334-0744 for your local TYMNET telephone number (TYMNET is the telephone network that connects you with the EPA Computer).

3. Contact the EPA Clearinghouse staff to obtain additional information and assistance necessary to log onto NATICH at the address and telephone number listed below:

EPA Clearinghouse Staff

John Vandenberg, Beth Hassett, Nancy Riley, Karen Blanchard, or Bob Schell

Pollutant Assessment Branch, MD-13
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

(919) 541-0850 FTS 629-0850

When you contact the Clearinghouse staff, you will be given interactive viewing access to all the information in the NATICH data base. To gain access to data entry programs to enter or update data for your agency, your assigned access level must be upgraded by the Clearinghouse staff. If you already have an account with EPA for interactive viewing access to information in the data base, you do not need to change your account or open a new account to obtain authorization to enter data. You need only contact the Clearinghouse Staff at (919) 541-0850 or FTS 629-0850 and request that your access level be upgraded for data entry authorization. Please note that each agency is responsible for maintaining strict oversight of the data entry function. Security can be enhanced by limiting the number of agency personnel with authorization to enter and edit data.

General Public

The NATICH data base is also available to the public through the National Technical Information Service (NTIS). Call Cathy Metzler or Lois Grooms, NTIS, at (703) 487-4807 and request an on-line license and billing agreement. Complete and return the agreement to NTIS. NTIS will then contact the EPA National Computer Center and obtain a User ID, account name, and password for you. Next, contact the Clearinghouse staff at (919) 541-0850 or FTS 629-0850 to obtain additional infor-

mation necessary to log onto NATICH. Each month the National Computer Center sends NTIS a billing tape, and NTIS will bill you for computer time (approximately $12-$15 per hour of access time). Data entry and editing access is not available to the general public.

EPA and other Federal Agencies

Staff members of EPA and other Federal agencies can also arrange for data viewing access to the NATICH data base by setting up an account with EPA as per the directions for State and local agencies or through use of an existing account on the NCC computer. Federal users must contact the Clearinghouse staff to receive data base authorization for their User IDs. Data entry and editing access is not available to EPA or other Federal Agency personnel.

LOGON PROCEDURES

Initial Logon

To logon to the NATICH data base, use the following procedure for your initial logon. Subsequent logons will involve a more streamlined procedure which will automatically enter certain logon parameters for you.

- First, dial your TYMNET number.

After you see the message "Connect", you will see the prompt "Please type your terminal identifier". When this prompt appears:

- Type the letter "A" to identify the terminal type ("A" stands for VT100 emulation). You do not need to strike the RETURN key after entering "A".

Next you will see the prompt "Please log in".

- Type "EPA1" and strike the RETURN key.

You will now see the message "Welcome to the U.S. Environmental Protection Agency National Computer Center". When the port selector menu appears:

- Enter "TCP" and strike the RETURN key.

Next you will see the prompt "Connected".

- Rapidly strike the "}" key (shift "]") at least four or five times; you do not need to strike the RETURN key. (You must begin typing "}"s within about 10 seconds after seeing the prompt or the computer will halt the logon procedure. The "}" key will work for IBM and many other terminals. For some terminals you may need to substitute the letter "M" for the "}"; for VT52 terminals, you may use "5".)

At this point a "Telecommunications Network" banner will appear with the prompt "Enter Command or M for Menu."

- Enter "PCICS" and strike the RETURN key.

The next screen will ask you for your User ID, account name, FIMAS ID, group, password, and initial transaction.

- Move from one prompt line to the next by striking the TAB key. Enter your User ID, account name, FIMAS ID, group, and password. (The FIMAS ID is "SAROP"; the group is the same as your account name.)
- Type "NSSP STACK=(LOGON ATCLO)" at the "INITIAL TRANSACTION" prompt.
- Then, TAB down and type an "X" in front of the "NO NEWS" prompt and strike the RETURN key.
- Strike the RETURN key when the next screen appears to "INVOKE THE INITIAL TRANSACTION."

The first menu for the NATICH data base will then appear. From that menu you may proceed to the interactive report programs.

Subsequent Logons

After you initially logon, subsequent logons will be more streamlined. Follow the initial logon instructions until you come to the screen which asks for your User ID.

- Enter your User ID and strike the RETURN key.
- Enter your password and strike the RETURN key.
- Strike the RETURN key again when the next screen appears to "INVOKE THE INITIAL TRANSACTION."

The first menu for the NATICH data base will then appear.

LOGOFF PROCEDURES

To exit from the NATICH data base:

- From the submenus, enter an "E" to exit and strike the RETURN key;
- Choose selection "QU" on the main reports menu and strike the RETURN key.

Now you will see the cursor in the upper left corner of your screen.

- Type "CSSF LOGOFF" and strike the RETURN key.

You are now logged off the computer, but are still on the telephone line. To disconnect the telephone line, follow the instructions that apply to your modem. Be sure to use this logoff procedure rather than just walking away from the computer; if you fail to logoff, your account will continue to be charged for access time.

IF YOU HAVE A PROBLEM

At times you may encounter difficulties logging onto the computer or problems while using the data base itself. Refer to Appendix A for guidance. If the problem continues, please call the Clearinghouse staff at (919) 541-0850 or FTS 629-0850.

SECTION 3
OVERVIEW OF THE INTERACTIVE DATA VIEWING SYSTEM

CONTENTS OF THE DATA BASE

NATICH Data

At this time, the NATICH data base contains data in three main categories: (1) data collected from State and local air pollution control agencies on their air toxics activities and names to contact for additional information; (2) citations and abstracts to published documents and descriptions of ongoing research related to toxic air pollutants from State and local agencies, EPA, and other Federal and International organizations; and (3) selected EPA risk analysis information. Table 3 describes the types of data residing in NATICH in more detail. These data are updated on a regular basis. It is likely that new and different types of data will be added to the data base in the future in response to advancement in fields such as pollution control, emergency response, and health risk assessment.

Organization

The NATICH interactive viewing system is screen-oriented and menu-driven. Its design allows you to select and view data without specific knowledge of the NATICH data base physical design or the programming language. It works by displaying menus on the screen which list the data selection choices available to you. User prompts guide you each time you are presented with a menu selection or blank to fill in. You will have access to all of the information in the NATICH data base through a series of 22 report programs.

The data are indexed in the data base in several ways and can be retrieved by searching on the indexes presented to you as menu choices. State and local agency data are indexed by agency, by CAS number and pollutant name (if it is pollutant-specific information), and by SIC code (if it is source-specific information). Permitting data submitted by State and local agencies are also indexed by the year the permit was issued or last amended. References to published documents and

TABLE 3. SUMMARY OF DATA CONTAINED IN THE NATICH DATABASE

Type of Data	Description
1. State and Local Agency Data	
General Information	Agency information (agency name, address, telephone); air toxics contact names for several specific areas of expertise, telephone numbers, number of work years assigned to each area.
Regulatory Program Description	Air toxics program description; acceptable ambient concentration guidelines or standards; pollutant research; methods development activities; non-health related impacts.
Permitting Information	General information such as the number of air toxics permits issued, whether or not permits are renewed, and if so, how often. For each permit case reported to the Clearinghouse: facility category; SIC Code; year permit issued; last year amended; permit identification number; control equipment; SCC codes; pollutants; emissions limits; source of emissions; and whether or not permit is notable (of particular interest).
Ambient Monitoring Information	Pollutants measured; year measured; location of measurement; sampling technique; analytical method.
Source Testing Information	General information such as the number of source tests involving air toxics. For each source test reported to the Clearinghouse: facility category; SIC Code; test date; test identification number; sampling techniques; analytical methods; pollutants measured; measured emissions rates; location of measurement; whether or not source test is notable (of particular interest).

(Continued)

TABLE 3. (Continued)

Type of Data	Description
Emissions Inventory Information	Emissions inventory description, including inventory status, data collection methodology, inventory scope, information collected, and inventory size. Inventory data, including pollutants, annual emissions, and area (State, county, city, or mobile, point source, etc.).
2. Published Documents and Ongoing Research Sponsored by State and Local Agencies, EPA, and Other Federal and International Organizations	
Reference Types	Air toxics support document Ambient monitoring Case study Chemical Hazard Information Profile (CHIP) Control technology document Dispersion modeling Emergency response Emission factor development Epidemiological study Exposure assessment Federal Register notice Health assessment Indoor air National Emission Standard for Hazardous Air Pollutants (NESHAP) New Source Performance Standard (NSPS) Pre-regulatory assessment Risk assessment Regulatory development guide Regulation or rule Source assessment Source sampling Toxicity testing Other

(Continued)

TABLE 3. (Continued)

Type of Data	Description
Sponsors	Environmental Protection Agency (EPA) International Agency for Research on Cancer (IARC) National Academy of Sciences (NAS) National Cancer Institute (NCI) National Institute for Occupational Safety and Health (NIOSH) National Institute of Environmental Health Sciences (NIEHS) National Toxicology Program (NTP) State and local air pollution control agencies (STATE/LOC) World Health Organization (WHO)
3. Selected EPA Risk Analysis Information	For many facilities for which EPA has generated risk analysis information: plant name; location; SIC code; pollutants emitted; annual emissions; estimated maximum concentrations; maximum individual risk per pollutant (lifetime cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentration, expressed as the probability of getting cancer in one's lifetime); annual incidence (predicted lifetime cancer incidence, expressed as cancer cases per year); date of the estimates; indication of whether or not location and/or other input parameters are verified.

ongoing research and regulatory development projects are indexed, as applicable, by the document or project number, reference type (e.g., control technology, health assessment), sponsor (e.g., State or local agency, EPA, NIOSH), pollutant name or CAS number, and SIC code. Selected EPA risk information is indexed by pollutant name or CAS number, SIC Code, and State. By selecting from the available menu choices, you can retrieve data from the data base to answer very specific, narrowly-defined questions or broad-based inquiries relevant to the evaluation and control of toxic air pollutants.

Quality Control

The usefulness of the NATICH data base to you and others is dependent, of course, on the quality of data entered into the data base. The NATICH data base controls the quality of the data in four important ways.

First, the data base imposes a data confirmation function in all data entry programs. A person entering data must confirm that each screen of data is what he/she intends to enter before the transaction is final. The data confirmation function is designed to minimize the unintentional entry of spurious or erroneous data.

Second, the data base automatically validates certain important data parameters, including CAS numbers, SIC Codes, and SCCs (Source Classification Codes), before information related to that parameter can be entered. The NATICH data base will not allow the entry of a CAS number, SIC code, or SCC unless it is known to the data base. All valid SIC Codes and SCCs and more than 2,000 CAS numbers are known to the data base. This validation function is intended to prevent the entry of erroneous CAS numbers, SIC Codes and SCCs. This is extremely important because the data, in large part, are keyed to and retrieved by these parameters.

Third, data entry and editing access is available only to the Clearinghouse staff and to authorized State and local agency personnel (who can access data only for their agency). The Clearinghouse encourages State and local agencies to maintain strict oversight of the data entry function and to limit the number of agency personnel with authorization to enter and edit data.

Fourth, each person who enters data into the data base is responsible for the quality of the data he/she enters. Although transparent to the user, all data entered into the data base are stamped with the date and the User ID used to gain access to the data entry function. This allows the Clearinghouse staff to monitor all data entry and update activities. State and local agencies are asked to review information contained in the data base once each year.

MENU STRUCTURE

You have interactive viewing access to all the data in the NATICH data base via menus of report programs. The report menus are organized hierarchically into a Home Menu, the Report Selection Menu, and six Report Menus, each containing a category of reports. The hierarchical arrangement means that you can step forward to a subordinate menu or step backward to the preceding (parent) menu. Figure 1 illustrates this relationship. You can leave the report programs from the Home Menu, the Report Selection Menu, or the individual Report menus.

If you have authorization to enter/edit data in addition to interactive viewing access, when you log onto the NATICH data base (see Section 2 for logon procedures) you will immediately see the HOME MENU which gives you a choice of selecting:

1. Clearinghouse Reports, or;
2 User Data Entry.

If you select #1, the REPORT SELECTION MENU appears. If you select #2, the FORMS MENU appears for the user data entry programs. For guidance on using the data entry programs, consult the NATICH Data Base Users Guide for Data Entry and Editing. If you have interactive viewing access only, when you logon you will bypass the HOME MENU entirely and go directly to the REPORT SELECTION MENU.

The REPORT SELECTION MENU gives you a choice of selecting a REPORT MENU for six categories of reports or of accessing a report directly via the report number. The options include:

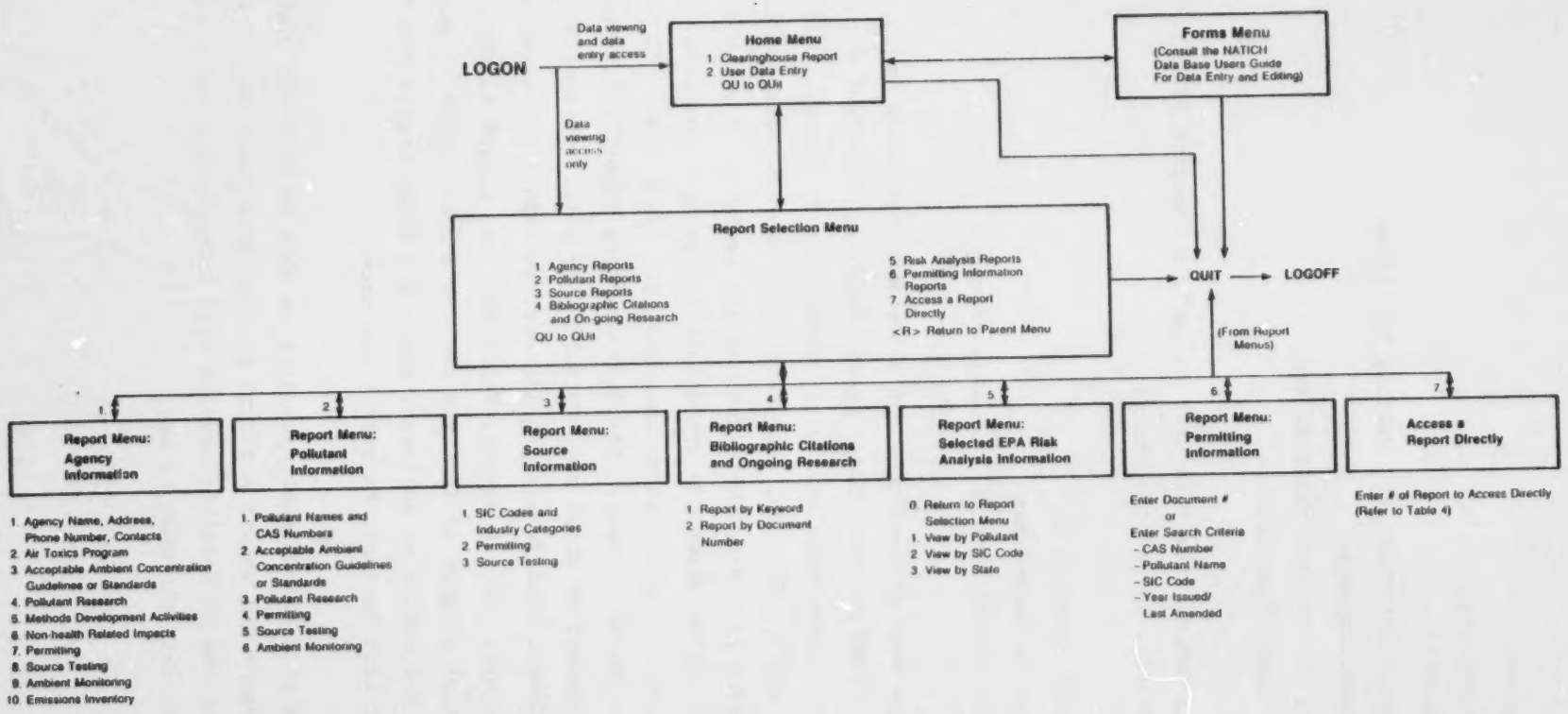


Figure 1. NATICH Interactive Data Viewing System - Menu Structure.

1. Agency Reports;
2. Pollutant Reports;
3. Source Reports;
4. Bibliographic Citations and Ongoing Research;
5. Risk Analysis Reports;
6. Permitting Information Reports; and
7. Access a Report Directly.

You can enter a number from this list to go to a specific REPORT MENU or to access a report directly, or you can enter:

QU to QUIT Session; or
<R> Return to Parent Menu
(which is the HOME MENU in this case).

The reports have been grouped into the above six categories based on the focus of the reports and the search criteria. Agency Reports, Pollutant Reports, and Source Reports all retrieve State and local agency data by agency, by pollutant name or CAS number, and by SIC Code, respectively. The Bibliographic Citations and Ongoing Research Report retrieves the citations and abstracts for published documents and research projects which you can select either by a document or project number or by a combination of key words including pollutant name, CAS number, SIC Code, reference type and/or sponsor. The Risk Analysis Report retrieves selected EPA risk analysis information which you can select by pollutant name or CAS number, by SIC Code, or by State. The Permitting Information Report retrieves the same permitting data available through Agency, Pollutant, and Source Reports; however, this is a more powerful program in that you can use a combination of search criteria, including CAS number or pollutant name, SIC Code, and/or the year the permit was issued or last amended, to select the data.

When you arrive at a Report Menu, you will be able to scan the available reports in that category and select a report to view data based on the focus of your search. Each of the 22 specific reports will also present you with menu options to select the data you wish to see.

REPORT PROGRAMS

Table 4 lists the 22 report programs currently available in the data base and provides a concise summary of each report. It lists the report number and title and describes the data retrieval options and the data the report retrieves. Please note that the report numbers associated with each report are no longer consecutive due to modifications of and additions to the data base.

Effective searching in the data base may involve moving from one category of report programs to another. When using the report programs in the POLLUTANT INFORMATION category, for example, you may see a piece of data (e.g., reference to a source test conducted by a specific agency for a pharmaceutical plant) which causes you to seek out additional information about the source tests conducted by that agency or about other source tests conducted for similar source types. You can obtain this information by accessing appropriate programs in the AGENCY INFORMATION category and the SOURCE INFORMATION category. If you would like to obtain more detailed information than is contained in the data base, you should write or telephone the contact listed on your screen or an appropriate contact from the contacts directory available via Report 1 (Agency Name, Address, Phone Number, Contacts).

Section 4 guides you through selected report programs with step-by-step instructions and figures showing actual screens of data from the data base. After you have some practice moving about the data base and become familiar with the menu choices and report programs, you should be able to retrieve the data you need quickly and effortlessly.

TABLE 4. SUMMARY OF NATICH INTERACTIVE REPORT PROGRAMS

Report No.	Report Title	Data Retrieval Options	Data Retrieved
AGENCY INFORMATION (Reports 1-9, 20)			
1.	Agency Name, Address, Phone #, and Contacts	(1) View agency name, address, phone number, contacts for specific agency.	For specific agencies registered in NATICH: agency name, address, phone number, air toxics contact names for several areas of expertise (e.g., permitting, ambient monitoring), telephone numbers, number of work years assigned to specific areas.
		(2) View agency name, address, phone number, contacts for all agencies	Same information as above, but for all agencies registered in NATICH presented on succeeding screens.
2.	Air Toxics Program Information	(1) View air toxics program descriptions for specific agency	Agency name and regulatory contact and phone number. Description of agency's air toxics control program in terms of whether current program (C), planned future program (F), or no program (N) corresponds to a series of statements on program status, program structure, program scope, and application. Comments or clarifications.
		(2) Select agencies by air toxics program characteristics	List of agencies with programs corresponding to program characteristics selected by user. Regulatory contacts and telephone numbers.
3.	Acceptable Ambient Concentration Guidelines or Standards by Agency	After selecting specific agency:	
		(1) Concentrations, units, and averaging times	Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, acceptable ambient concentration guidelines or standards, units, and averaging times. Comments or clarifications.
		(2) Basis, sources, and uncertainty factors	Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, whether or not guideline or standard is based on an occupational exposure level (OEL) and if yes, the source (ACGIH, OSHA, or NIOSH) and uncertainty factor used, other bases for guideline or standard (original research, adopted from another agency, or other). Comments or clarifications.
4.	Pollutant Research by Agency	Select specific agency	Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, type of research or assessment activity (e.g., health assessment, source assessment), availability of supporting documentation. Comments or clarifications.
5.	Methods Development Activities by Agency	(1) View methods development activities for specific agency	Agency name and regulatory contact and phone number. Brief description of methods development activities in several areas (e.g., emissions testing, ambient monitoring).
		(2) List agencies that have submitted methods development activity information	List of agencies that have submitted methods development activity information in areas selected by user.
6.	Non-Health Related Impact Information by Agency	(1) View non-health related information for specific agency	Agency name. Narrative case study information on non-health related impacts of toxic air pollutants (e.g., materials, vegetation damage).
		(2) List agencies that have submitted non-health related impact information	List of agencies that have submitted non-health related impact information to the data base.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
7.	Permitting Information by Agency	(1) View list of permits for a specific agency	Agency name and permitting contact and telephone number. Total number of facilities agency has permitted to control air toxics emissions. Whether or not permits are renewed, and if so, how often. Whether or not permitting data are maintained in computerized files. For each permit case registered by agency in data base: SIC Code, facility category, date of permit, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option 2 of this report.
		(2) View permit description via access # from (1).	Access number. Agency name and permitting contact and phone number. Facility category, SIC Code, year issued, last year amended, permit ID number, control equipment, whether or not permit is notable (not routine), comments. List of pollutant names, CAS numbers, emission limits and units, SCCs, and sources of emissions subject to limit.
8.	Source Testing Information by Agency	(1) View list of source tests for a specific agency	Agency name and source test contact and telephone number. Total number of source tests conducted for air toxics evaluation. Whether or not source test data are maintained in computerized files. For each source test registered by agency in data base: SIC Code, facility category, test date, whether or not test is notable (not routine), access number (unique number assigned by data base to each source test). Use the access number to obtain more detailed information about a specific source test in Option 2 of this report.
		(2) View source test description via access # from (1).	Access number. Agency name and source test contact and phone number. Facility category, SIC Code, test date, test ID number, sampling technique, analytical method, whether or not source test is notable (not routine), comments. List of pollutant names, CAS numbers, measured emission rates and units, SCCs, and location of measurement.
9.	Pollutants Monitored by Agency	Select specific agency	Agency name and ambient monitoring contact and telephone number. List of pollutants monitored by agency. Option to enter pollutant name to view monitoring information. Monitoring information: pollutant name, CAS number, location of measurement (city and county), year measured, sampling technique, and analytical method.
20.	Emissions Inventory Information	(1) View air toxics emissions inventory information for a specific agency	Agency name and inventory contact and telephone number. Description of agency's air toxics emissions inventory in terms of answers to a series of yes/no and fill-in-the-blank questions on inventory status, data collection methodology, inventory scope, inventory information, and inventory size. Comments or clarification.
		(2) Select agencies by emissions inventory characteristics	List of agencies with inventories corresponding to characteristics selected by user. Emissions contacts and telephone numbers.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
		(3) View inventory data for specific agency	Agency name. List of pollutant names, CAS numbers, annual emissions in metric tons/year, and type of emissions (e.g., point, area)
POLLUTANT INFORMATION (Reports 10-15)			
10.	Pollutant Names, Synonyms, and CAS Numbers	(1) Select pollutant by name	CAS number, pollutant name, list of synonyms.
		(2) Select pollutant by CAS number	Same as above.
11.	Acceptable Ambient Guidelines or Standards by Pollutant	After entering pollutant name or CAS number:	
		(1) Concentrations, units, and averaging times	Pollutant name and CAS number. List of agencies with acceptable ambient concentrations or guidelines for selected pollutant, concentrations, and units, averaging times, and whether or not comments have been submitted by agency. (View comments by going to Report 3.)
		(2) Basis, sources, and uncertainty factors	Pollutant name and CAS number. List of agencies with acceptable ambient concentrations or guidelines for selected pollutant, whether or not guidelines or standards are based on an occupational exposure level (OL) and if yes, the source (ACGIH, OSHA, or NIOSH) and uncertainty factor used, other bases for guideline or standard (original research, adopted from another agency, or other), and whether or not comments have been submitted by agency. (View comments by going to Report 3.)
12.	Pollutant Research by Pollutant	(1) Select pollutant by name	Pollutant name and CAS number. List of agencies that have submitted pollutant research information for selected pollutant, types of research or assessment activities (e.g., health assessment, source assessment), availability of supporting documentation, and whether or not comments have been submitted by agency. (View comments by going to Report 4.)
		(2) Select pollutant by CAS number.	Same as above.
13.	Permitting Information by Pollutant	(1) View list of permits for specific pollutant (by pollutant name or CAS number)	Pollutant name and CAS number. List of agencies that have permitted a facility to control selected pollutant, SIC Code and facility category of permitted facility, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option (2) of this report.
		(2) View permit description via access # from (1).	Same as Report 7, Option (2).
14.	Source Testing Information by Pollutant	(1) View list of source tests for specific pollutant (by pollutant name or CAS number)	Pollutant name and CAS number. List of agencies that have tested a facility for emissions of selected pollutant, SIC Code, and facility category of tested facility, whether or not test is notable (not routine), access number (unique number assigned by data base to each sample test). Use the access number to obtain more detailed information about a specific source test in Option (2) of this report.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
		(2) View source test description via access # from (1)	Same as Report 8, Option (2).
15.	Ambient Monitoring Data by Pollutant	(1) Select pollutant by name	Pollutant name and CAS number. List of agencies that have monitored for selected pollutant in ambient air, year(s) measured, location(s) of measurement (city and county).
		(2) Select pollutant by CAS number	Same as above.
SOURCE INFORMATION (Reports 16-18)			
16.	Standard Industrial Classification (SIC) Code Descriptions	Select 2-, 3-, or 4- digit SIC Code	2-digit code and corresponding Major Group name, 3-digit code and corresponding Industry group name, and 4-digit code and corresponding Industry name.
17.	Permitting Information by SIC Code	(1) View list of permits for specific SIC Code	2-, 3-, or 4-digit SIC Code. List of agencies that have permitted a facility categorized in SIC group selected, SIC code and facility category of permitted facility, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option (2) of this report.
		(2) View permit description via access # from (1)	Same as Report 7, Option (2).
18.	Source Testing Information by SIC Code	(1) View list of source tests for a specific SIC Code	2-, 3-, or 4-digit SIC Code. List of agencies that have tested a facility categorized in SIC Code selected, SIC Code, and facility category of tested facility, whether or not test is notable (not routine), access number (unique number assigned by data base to each source test). Use the access number to obtain more detailed information about a specific source test in Option (2) of this report.
		(2) View source test description via access # from (1)	Same as Report 8, Option (2).
BIBLIOGRAPHICAL CITATIONS AND ONGOING RESEARCH (Report 19)			
19.	Bibliographic Citations and Ongoing Research	(1) Report by keyword (available search criteria: pollutant name, CAS number, SIC Code, reference type, sponsor acronym)	List of search criteria selected. Number of bibliographic citations found. Number of ongoing research and regulatory development projects found.
		a. View bibliographic citations only	Citation, abstract, ordering information, and keywords that reference citation for all bibliographic citations found, on succeeding screens.
		b. View ongoing research and regulatory development research projects only	Title, status, contact, and phone number, project description, and keywords that reference project for all projects found, on succeeding screens.
		c. View both bibliographic citations and ongoing research projects	Information as described in a. and b. above for both bibliographic citations and ongoing research projects, on succeeding screens.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
RISK ANALYSIS INFORMATION (Report 21)			
21.	Selected EPA Risk Analysis Information	(1) View by pollutant.	Pollutant name and CAS number. Unit cancer risk factor. List of plants emitting selected pollutant for which EPA has collected risk analysis information. Plant-specific data: plant name, SIC Code, location (city or county and State), total emissions of selected pollutant (kg/yr), maximum concentration (ug/m^3), maximum individual cancer risk (lifetime cancer risk for individuals continuously exposed to selected pollutant at highest predicted annual concentration expressed as the probability of getting cancer in one's lifetime), annual incidence (predicted lifetime cancer incidence expressed as cancer cases per year), date of estimates, whether or not location and/or other input parameters are verified.
		(2) View by SIC Code	SIC Code and description. List of pollutants emitted by plants categorized in SIC group selected for which EPA has collected risk analysis information. Plant-specific data as described in (1) above.
		(3) View by State	State. List of pollutants emitted by plants in State selected for which EPA has collected risk analysis information. Plant-specific data as described in (1) above.
PERMITTING INFORMATION (Report 22)			
22.	Permitting Information by Search Criteria	(1) Enter access # (obtained using Option (2) of this report)	Same as Report 7, Option (2).
		(2) Enter search criteria (available search criteria: Cas number, pollutant name, SIC Code, year permit issued/last amended)	List of search criteria selected. Information on permits that satisfy search criteria: pollutants emitted and CAS numbers, facility category, SIC Code, SCC, agency that issued permit, year permit was issued/last amended, emission limit and unit, access number (unique number assigned by data base to each permit). Use access number to obtain more detailed information about a specific permit in Option (1) of this report.

SECTION 4
SELECTED REPORT PROGRAMS

AGENCY REPORTS

Complete information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the AGENCY INFORMATION category. Each report in this group retrieves certain information about a specific agency's air toxics activities or lists agencies which satisfy search criteria selected by the user. Use this group of reports when the focus of your search is to retrieve information about a specific agency rather than a specific pollutant or source.

Available reports include:

1. Report 1 - Agency Name, Address, Phone Number, and Contacts;
2. Report 2 - Air Toxics Program Information by Agency;
3. Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency;
4. Report 4 - Pollutant Research Data by Agency;
5. Report 5 - Methods Development Activities by Agency;
6. Report 6 - Non-health Related Impact Information by Agency;
7. Report 7 - Permitting Information by Agency;
8. Report 8 - Source Testing Information by Agency;
9. Report 9 - Ambient Monitoring Information by Agency; and
10. Report 20- Emissions Inventory Information by Agency.

Selecting an Agency

When using this group of report programs you will be called on to select a specific agency in order to view that agency's data. You do not have to know the names of all the agencies included in the data base in order to access the data. When you select a report program in this group, at the appropriate time you will see a prompt:

ENTER 2-LETTER STATE ABBREVIATION (OR <R> TO EXIT):

- Type in the 2-letter State postal abbreviation (e.g., CA, PA) of the State where the agency you wish to select is located and strike the RETURN key.

A numbered list of agencies in the State will appear along with a prompt, as in this example for the State of Illinois:

1. Department of Inspections and Permits, City of Evanston
2. Bedford Park Environmental Quality Control Board
3. IL Environmental Protection Agency, Division of Air Pollution Control

ENTER SELECTION OR <R> TO CONTINUE:

- Type in the number from the list which corresponds to the agency you wish to select and strike the RETURN key, or, if the list of agencies continues to the next screen and you wish to see the complete list, strike the RETURN key without entering a number.

After you have selected a specific agency by entering a number and striking the RETURN key, the first screen of data for that agency will appear. Prompts will guide you on every screen as you move through the report programs.

Example Reports

Step-by-step instructions are provided for the following reports:

- Report 1 - Agency General Information;
- Report 5 - Methods Development Activities By Agency; and
- Report 20- Emissions Inventory Information By Agency.

When you are familiar with these report programs you should have no problem executing the other report programs in this group.

Report 1 - Agency General Information

When you select Report 1 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION MENU, a menu screen for Report 1 will appear. The menu gives you three numbered options:

(0) Return to Main Reports Menu;

(1) View Agency Name, Address, Phone Number, Contacts for Specific Agency; and

(2) View Agency Name, Address, Phone Number, Contacts for All Agencies.

Enter the number which corresponds to the option you wish to select.

If you select option (1), you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, address, and telephone number, and contact names, telephone numbers, and number of work years in 10 areas of expertise. The value for number of work years represents the total number of work years assigned to air toxics subject area, including management levels. Figure 2 shows an example data screen from this report for the Cleveland Division of Air Pollution Control in Cleveland, Ohio.

When you have finished viewing the data on the screen, you can simply strike the RETURN key to return to the Report 1 menu.

If you select Option (2), you can scroll through these data for every agency included in the data base, in alphabetical order by State, on succeeding screens. On each screen you have the option to continue scrolling through the data (by striking the RETURN key) or to exit to the Report 1 menu (by entering "E").

REPORT 1. AGENCY NAME, ADDRESS, PHONE #, AND CONTACTS

NAME: CLEVELAND DIV. OF AIR POL. CONTROL, DEPT. OF PUBLIC HEALTH
ADDRESS: 2735 BROADWAY AVE.
CITY: CLEVELAND STATE: OH
ZIP: 44115 PHONE: (216)-664-3591

SUBJECT AREA	CONTACT NAME	TELEPHONE	WORK YRS
REGULATORY PROGRAM:	DOUGLAS D.SEAMAN	(216)-664-3512	1.0
PERMITTING:	DOUGLAS D.SEAMAN	(216)-664-3512	1.0
SOURCE TESTS:	RICHARD A. DELL	(216)-664-3591	14.0
AMBIENT MONITORING:	EDWARD J. FASKO	(216)-664-3560	3.0
EMISSIONS INVENTORY:	PAUL KARBOWSKI	(216)-664-3510	5.0
HEALTH EFFECTS:	RICHARD A. DELL	(216)-664-3591	14.0
INDOOR AIR:	GARY J. NIED	(216)-664-3500	8.0
COMPLIANCE/ ENFORCEMENT:		(---)---------	
DISPERSION/ EXPOSURE MODELING:		(---)---------	
RISK COMMUNICATION:		(---)---------	

PRESS <R> TO RETURN TO REPORT 1 MENU _

Figure 2. Example Data Screen Showing Agency Name, Address, Phone #, and Contacts for a Selected Agency.

Report 5 - Methods Development Activities by Agency

When you select Report 5 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 5 will appear. The menu screen first lists the eight types of methods development activities included in the data base:

1. Emissions Testing;
2. Ambient Monitoring;
3. Dispersion Modeling Application, Evaluation and/or Development;
4. Accident Prevention and/or Emergency Response Procedures;
5. Ambient Exposure Assessment;
6. Emissions Modeling from Non-Traditional Sources;
7. Indoor Air Characterization, Mitigation; and
8. Other.

The menu gives you three numbered options:

(0) Return to Main Reports Menu;

(1) View Methods Development Activities for Specific Agency; and

(2) List Agencies that have Submitted Methods Development Activity Information.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, regulatory contact, and telephone number, and gives a narrative description of the selected agency's methods development activities in the areas of emissions testing and ambient monitoring, if provided by the agency. Figure 3 shows an example of this data screen from the data base for the Texas Air Control Board. Three succeeding screens give narrative descriptions (again, if submitted by the agency) of the selected agency's methods development activities in the remaining six areas, two areas per screen. On each screen you have the option to continue to the next

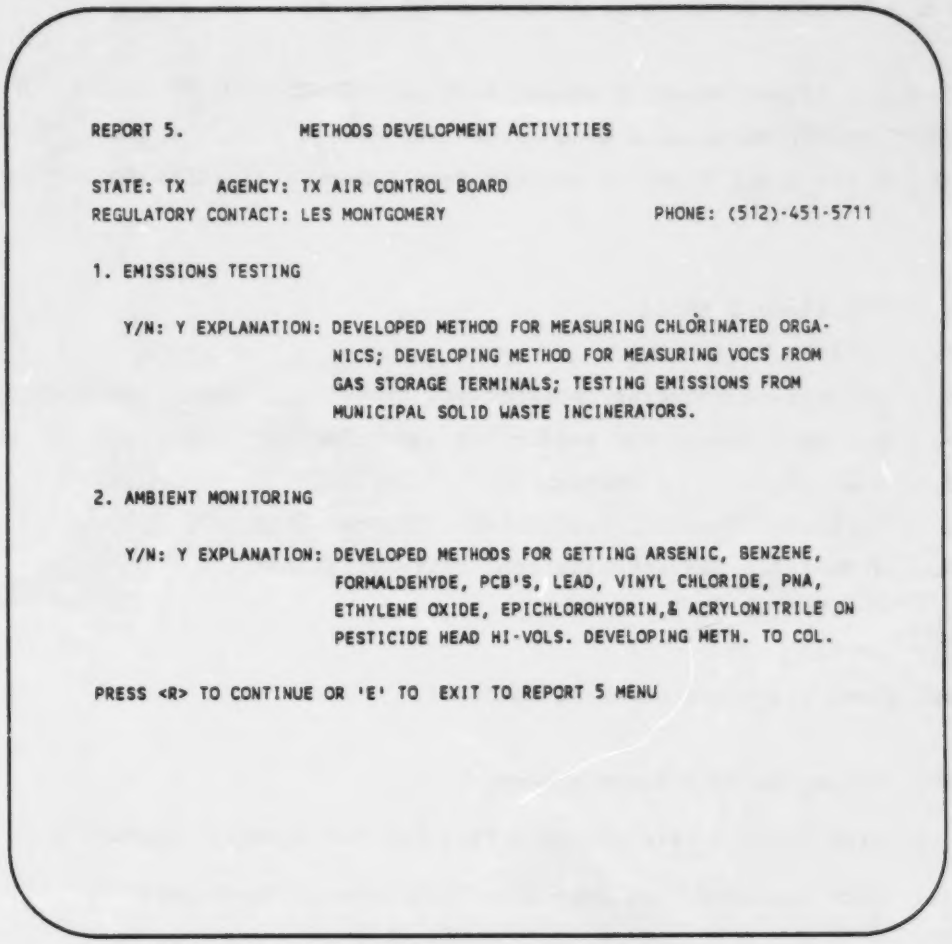

REPORT 5. METHODS DEVELOPMENT ACTIVITIES
STATE: TX AGENCY: TX AIR CONTROL BOARD
REGULATORY CONTACT: LES MONTGOMERY PHONE: (512)-451-5711
1. EMISSIONS TESTING
Y/N: Y EXPLANATION: DEVELOPED METHOD FOR MEASURING CHLORINATED ORGANICS; DEVELOPING METHOD FOR MEASURING VOCS FROM GAS STORAGE TERMINALS; TESTING EMISSIONS FROM MUNICIPAL SOLID WASTE INCINERATORS.
2. AMBIENT MONITORING
Y/N: Y EXPLANATION: DEVELOPED METHODS FOR GETTING ARSENIC, BENZENE, FORMALDEHYDE, PCB'S, LEAD, VINYL CHLORIDE, PNA, ETHYLENE OXIDE, EPICHLOROHYDRIN,& ACRYLONITRILE ON PESTICIDE HEAD HI-VOLS. DEVELOPING METH. TO COL.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 5 MENU

Figure 3. Example Data Screen Showing Methods Development Activities for a Selected Agency.

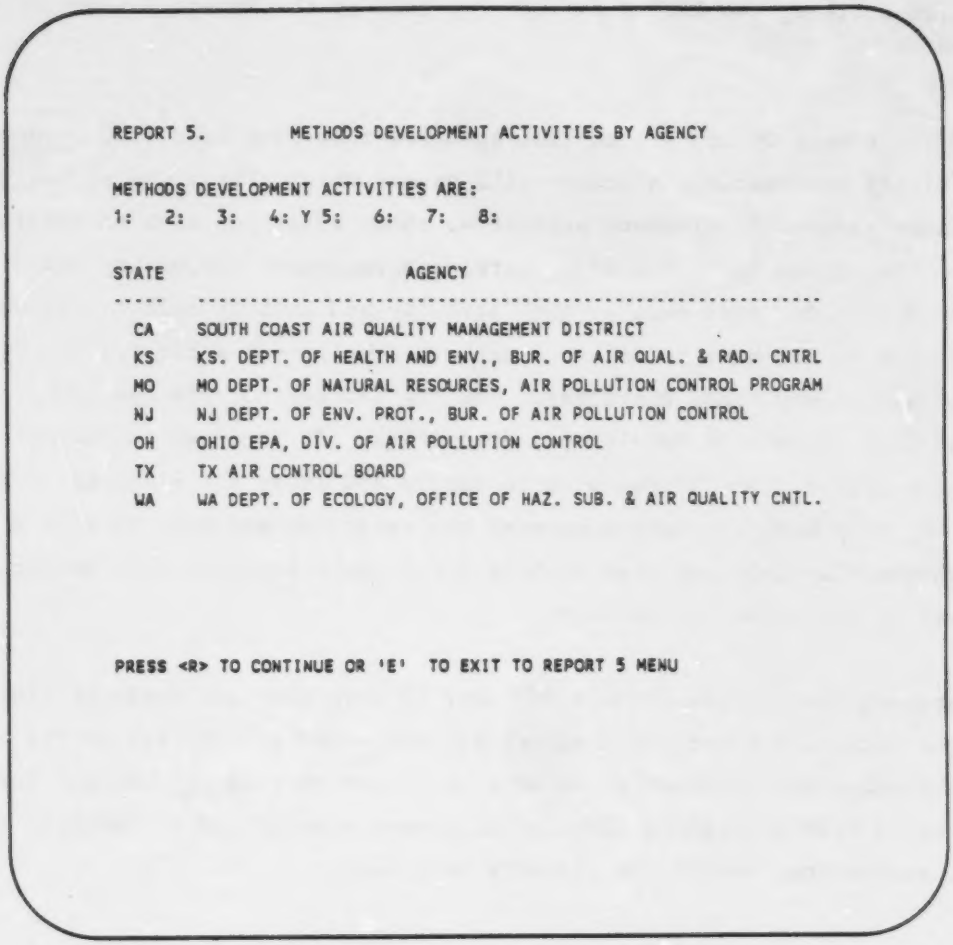
screen (by striking the RETURN key), or to exit to the Report 5 menu (by entering "E").

If you select Option (2) to list agencies that have submitted methods development activity information, a screen will appear which allows you to designate the one or more methods development activities about which you wish to retrieve information. The screen lists the eight methods development activities and directs you to enter a "Y" (for yes) next to each activity you wish to select. Leave the space blank if you do not want to select a methods development activity; do not enter an "N" (for No) or any other character. Use the TAB key to move the cursor up and down the list of methods development activities. If you need to "erase" a "Y", move the cursor to the "Y" you wish to remove and press the SPACE bar. Strike the RETURN key only when you have completed the selection and wish to view a list of the agencies that have reported methods development activity information to the data base in the areas you selected.

Remember that if you enter a "Y" next to more than one activity (for example, emissions testing and ambient monitoring), the computer will search for agencies that have submitted information on both emissions testing and ambient monitoring. If you would like a complete list for emissions testing and a complete list for ambient monitoring, select one activity at a time.

When you have completed your selection of methods development activities, strike the RETURN key. A data screen will appear which indicates the methods development activities you selected and lists State and local agencies, in alphabetical order by State, that have reported methods development activity information to the data base in the areas you selected. Figure 4 shows an example of this data screen from the data base for which accident prevention and/or emergency response procedures (number 4) was selected. If the list continues on to more than one screen, you can continue to the next screen by striking the RETURN key or you can exit to the Report 5 menu by entering "E".

To view a narrative description of the methods development activities for any agency on the list, return to the Report 5 menu and execute Option (1).



REPORT 5. METHODS DEVELOPMENT ACTIVITIES BY AGENCY

METHODS DEVELOPMENT ACTIVITIES ARE:
1: 2: 3: 4: Y 5: 6: 7: 8:

STATE	AGENCY
CA	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
KS	KS. DEPT. OF HEALTH AND ENV., BUR. OF AIR QUAL. & RAD. CNTRL
MO	MO DEPT. OF NATURAL RESOURCES, AIR POLLUTION CONTROL PROGRAM
NJ	NJ DEPT. OF ENV. PROT., BUR. OF AIR POLLUTION CONTROL
OH	OHIO EPA, DIV. OF AIR POLLUTION CONTROL
TX	TX AIR CONTROL BOARD
WA	WA DEPT. OF ECOLOGY, OFFICE OF HAZ. SUB. & AIR QUALITY CNTL.

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 5 MENU

Figure 4. Example Data Screen Listing Agencies That Have Submitted Selected Methods Development Activity Information.

Report 20 - Emissions Inventory Information

When you select Report 20 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 20 will appear. The menu gives you four numbered options:

(0) Return to Main Reports Menu;

(1) View Air Toxics Emissions Inventory Information for a Specific Agency;

(2) Select Agencies by Emissions Inventory Characteristics; and

(3) View Inventory Data for a Specific Agency.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, emissions inventory contact and telephone number, and describes the agency's air toxics emissions inventory in terms of answers to a series of yes/no and fill-in-the blank questions on inventory status, data collection methodology, inventory scope, inventory information, and inventory size. The description continues on to four additional screens, the last of which gives narrative comments about the inventory, if such comments were submitted by the agency. Figure 5 shows an example of the first data screen in the sequence for the Santa Barbara County (California) Air Pollution Control District. You can move from one screen to the next by striking the RETURN key or you can exit to the Report 20 menu from any screen in the sequence by entering "E".

If you choose Option (2) to select agencies by emissions inventory characteristics, a series of screens will appear which allow you to designate characteristics of an emissions inventory from a list. The computer will search in the data base for agencies whose emissions inventories correspond to the characteristics you select.

```
REPORT 20.          EMISSIONS INVENTORY INFORMATION

STATE: CA   AGENCY: SANTA BARBARA CO. AIR POLLUTION CONTROL DISTRICT
INVENTORY CONTACT: BOBBIE BRATZ          PHONE: (805)-964-8111

        INVENTORY STATUS
  Y     1.  HAVE YOU COMPILED AN AIR TOXICS EMISSIONS INVENTORY.
        2.  IF NO INVENTORY EXISTS, ARE THERE PLANS TO COMPILE ONE?
            WHEN    /   /
        DATA COLLECTION METHODOLOGY
  N     3.  IS YOUR INVENTORY BASED ON DATA SUPPLIED THROUGH
            THE PERMIT PROCESS?
  Y     4.  IS YOUR INVENTORY BASED ON QUESTIONNAIRES SENT TO SOURCES?
        5.  HOW OFTEN IS YOUR INVENTORY INFORMATION UPDATED?
  Y         ALL DATA UPDATED REGULARLY (FREQUENCY? 2YEAR  )
            PORTIONS UPDATED REGULARLY (FREQUENCY?        )
            UPDATED IRREGULARLY
            EXISTING INVENTORY IS THE RESULT OF A ONE-TIME EFFORT WITH NO
            KNOWN PLANS TO UPDATE.  WHEN WAS INVENTORY COMPLETED?    /    /


PRESS <R> TO CONTINUE OR 'E' TO RETURN TO REPORT 20 MENU
```

Figure 5. Example Data Screen Showing Air Toxics Emissions Inventory Information for a Selected Agency.

The first screen in the series directs you to enter a "Y" (for Yes) next to each characteristic you wish to select (if you enter any other character, a prompt will direct you to re-enter). Figure 6 shows an example of this screen on which two "Y"s have been entered. Use the TAB key to move the cursor up and down the list of characteristics. If you need to "erase" a "Y", move the cursor to the "Y" you wish to remove and press the SPACE bar. When you finish designating characteristics on this screen, you can continue to succeeding screens to designate additional characteristics by striking the RETURN key, or you can view a list of agencies whose emissions inventories correspond to the characteristics you selected by entering "E" in the selection field. (Remember to TAB down to the selection field before you enter an "E").

Each time you enter a "Y" next to a characteristic, the search becomes more restrictive. The computer will search for agencies whose programs correspond to all of the characteristics you designate.

When you have completed your selection of characteristics, strike the RETURN key if you are on the last screen or enter "E" if you are on any of the previous screens (the prompts will guide you). A data screen will appear which indicates the characteristics you selected and lists agencies, in alphabetical order by State, whose emissions inventories correspond to the characteristics you selected. The list also includes the emissions contact and telephone number for each agency. Figure 7 shows an example of this data screen from the data base for the characteristics selected on the screen in Figure 6. If the list continues on to more than one screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 20 menu by entering "E".

If you select Option (3) from the Report 20 menu to view inventory data for a specific agency, you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists pollutants included in the inventory by the agency you selected, in alphabetical order by pollutant. The list also includes the CAS number, annual emissions in metric tons/yr, and location (area) for each pollutant. Figure 8 shows an example of this data screen for the Puget

```
REPORT 20.          EMISSIONS INVENTORY INFORMATION

(ENTER 'Y' OR ' ' TO SELECT PROGRAM CHARACTERISTICS)

        INVENTORY STATUS
  Y     1.  WE HAVE COMPILED AN AIR TOXICS EMISSIONS INVENTORY.
  _     2.  IF NO INVENTORY EXISTS, ARE THERE PLANS TO COMPILE ONE?

        DATA COLLECTION METHODOLOGY
  _     3.  IS YOUR INVENTORY BASED ON DATA SUPPLIED THROUGH
            THE PERMIT PROCESS?
  Y     4.  IS YOUR INVENTORY BASED ON QUESTIONNAIRES SENT TO SOURCES?
        5.  HOW OFTEN IS YOUR INVENTORY INFORMATION UPDATED? (CHOOSE ONE)
  _         ALL DATA UPDATED REGULARLY
  _         PORTIONS UPDATED REGULARLY
  _         UPDATED IRREGULARLY
  _         EXISTING INVENTORY IS THE RESULT OF A ONE-TIME EFFORT WITH
            NO KNOWN PLANS TO UPDATE


PRESS <R> TO CONTINUE, OR 'E' TO VIEW SELECTED STATES _
```

Figure 6. Example Selection Screen to Select Agencies By Emissions Inventory Characteristics.

REPORT 20. EMISSIONS INVENTORY INFORMATION

INVENTORY CHARACTERISTICS SELECTED:

1: Y 2: 3: 4: Y 5: 6: 7: 8: 9:
10: 11: 12:

STATE	AGENCY	EMISSIONS CONTACT	PHONE NUMBER
AK	AK	NONE	(---)---------
AZ	AZ-PHOENIX	NONE	(---)---------
AZ	AZ-PIMACO	NONE	(---)---------
CA	CA-BAAQMD	NONE	(---)---------
CA	CA-SCAQMD	MARK SAPERSTEIN	(818)-572-2118
CA	CA-SAC.	NONE	(---)---------
CA	CA-S.BARB.	NONE	(---)---------
CT	CT	HARI RAO	(203)-566-8167
ID	ID	ROBERT WILKOSZ	(208)-334-5898
IN	IN	EUGENE DUVAL	(317)-232-8229
IN	IN-HAMMOND	RONALD NOVAK	(219)-853-6305
IN	IN-INNAP	DAVID R. JORDON	(317)-633-5497

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 20 MENU

Figure 7. Example Data Screen Listing Agencies That Exhibit Selected Emissions Inventory Characteristics.

REPORT 20. EMISSIONS INVENTORY POLLUTANT LIST

STATE: WA AGENCY: PUGET SOUND AIR POLLUTION CONTROL AGENCY

POLLUTANT	CAS#	EM RATE	UNIT	LOCATION
ACENAPHTHENE	83-32-9	54.0000	MT/YR	PSAPCA
ACETALDEHYDE	75-07-0	72.0000	MT/YR	PSAPCA
ACETONE	67-64-1	358.0000	MT/YR	PSAPCA
AMMONIA	7664-41-7	34.0000	MT/YR	PSAPCA
ANTIMONY	7440-36-0	0.0000	MT/YR	NONE CALCULATED
ARSENIC AND COMPOUND	7440-38-2	0.0000	MT/YR	NONE CALCULATED
BENZENE	71-43-2	1178.0000	MT/YR	PSAPCA
BENZO(A)PYRENE	50-32-8	3.0000	MT/YR	PSAPCA
BUTANONE,2-	78-93-3	1008.0000	MT/YR	PSAPCA
BUTYL ALCOHOL	71-36-3	120.0000	MT/YR	PSAPCA
BUTYLACETATE,N-	123-86-4	192.0000	MT/YR	PSAPCA
BUTYROLACTONE,4-	96-48-0	5.0000	MT/YR	PSAPCA

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO EMISSIONS INVENTORY REPORT MENU

Figure 8. Example Data Screen Showing Emissions Inventory Data for a Selected Agency.

Sound (Washington) Air Pollution Control Agency. If the list continues on to succeeding screens you can proceed to the next screen by striking the RETURN key or you can exit to the Report 20 menu by entering "E".

POLLUTANT REPORTS

Pollutant-specific information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the POLLUTANT INFORMATION category. Each report in this group retrieves certain pollutant-specific State and local agency data for pollutants specified by the user. If you wish to retrieve all available information from State and local agencies about a specific pollutant, use this group of reports. Available reports include:

1. Report 10 - Pollutant Names, Synonyms, and CAS Numbers;
2. Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant;
3. Report 12 - Pollutant Research Data by Pollutant;
4. Report 13 - Permitting Information by Pollutant;
5. Report 14 - Source Testing Information by Pollutant; and
6. Report 15 - Ambient Monitoring Information by Pollutant.

Selecting A Pollutant

When using this group of report programs you will need to select a specific pollutant. You may access pollutant-specific information in the data base by entering either a pollutant name or a CAS number. This choice may prove useful to you if you only know a name or a CAS number. However, to avoid potential problems caused by entry errors (misspelling or alternate spelling of the pollutant name or the use of a synonym not recognized by the data base) the use of a CAS number is preferable. The computer searches for an exact match between the name you enter and the pollutant names and synonyms registered in the data base.

Groups of chemicals or pollutants such as "organic compounds" that cannot be identified more precisely by a CAS number have been assigned unique Clearinghouse identifiers in place of CAS numbers. Appendix D lists the identifiers for chemical

groups included in the data base. Clearinghouse identifiers can be used to select a group of pollutants in the same way a CAS number is used to select a single pollutant.

When you execute a report program from this group and choose to select a pollutant by the pollutant name, you will see a prompt:

ENTER POLLUTANT NAME (OR <R> TO EXIT):

- Type in the name of the pollutant in the space provided. If you make an error in spelling, you can edit your entry by using the direction keys, the BACKSPACE key, and/or the SPACE bar and typing over the incorrect characters (see Appendix B for guidance on keyboard functions). Strike the RETURN key when you are satisfied with your entry.

If the computer finds information in the data base about the pollutant you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the pollutant you selected, a message will appear on the top of your screen which informs you that no record was found. You may want to execute the search again using an alternate spelling or synonym or the CAS number.

When you choose to select a pollutant by the CAS number, you will see the prompt:

ENTER CAS # (OR <R> TO EXIT):

- Type in the CAS number in the space provided, including the dashes (-) between the three number sets. Strike the RETURN key.

If the computer finds information in the data base about the pollutant you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the pollutant you selected, a message will appear on the top of the screen which informs you that no record was found. You may want to check the CAS number you entered for accuracy.

Example Reports

Step-by-step instructions are provided for the following reports:

- Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant; and
- Report 12 - Pollutant Research Data by Pollutant.

When you are familiar with these report programs you should have no problem executing the other report programs in this group.

Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant

When you select Report 11 either from the POLLUTANT REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 11 will appear. The menu gives you three numbered options:

(0) Return to a Main Reports Menu;
(1) Select Pollutant by Name; and
(2) Select Pollutant by CAS Number.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) or Option (2) you will be prompted to enter either a pollutant name or a CAS number, respectively, as described above (see instructions under the heading "Selecting A Pollutant"). After you designate a pollutant either by pollutant name or by CAS number, a screen will appear which repeats the pollutant name and the CAS number and gives you the option to select either (1) concentrations, units, and averaging times, or (2) basis, sources, and uncertainty factors, by entering either a "1" or a "2". This screen also allows you to quit the session (by entering "QU"), select next pollutant (by entering "NE") or return to the parent menu (by striking the RETURN key).

If you enter "1" to select concentrations, units, and averaging times, a data screen will appear which again repeats the pollutant name and CAS number and lists agencies which have established acceptable ambient concentration guidelines or standards for this pollutant. Information on the screen includes the concentration, units, and averaging time for each agency on the list and whether or not the agency has submitted comments on their acceptable ambient concentration guidelines or standards. If so, the comments may be viewed by going to Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency. Figure 9 shows an example of this data screen for chromium. The field for concentration is a numeric field which the data base automatically prefills with 0.0000. Therefore a concentration of 0.0000 may not necessarily mean 0. It may mean that the concentration was not submitted or that the concentration is less than 0.0001 (1/10,000). For example, a concentration of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 11 menu by entering an "E".

If you enter "2" from the selection screen to select basis, sources, and uncertainty factors, a data screen will appear which once more repeats the pollutant name and CAS number and provides information on how the agencies established acceptable ambient concentration guidelines or standards for this pollutant. Information on the screen includes agencies which have established guidelines or standards, whether or not the guideline or standard is based on occupational exposure levels (OELs), and if so, the source of the OEL (ACGIH, OSHA, and/or NIOSH) and the uncertainty factor used to adjust the OEL. (Uncertainty factors are numbers used to adjust an occupational exposure level and duration to an ambient exposure level and duration to reflect protection of sensitive populations, uncertainty in health effects, etc.) The screen also indicates other possible bases for establishing a guideline or standard (agency sponsored original research, adoption of a guideline or standard set by another agency or group, or other) and whether or not the agency has submitted comments to the data base on their acceptable ambient concentration guidelines or standards. Comments for a specific agency can be viewed by going to Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency. Figure 10 shows an example of this data screen for chromium.

REPORT 11. ACCEPTABLE AMBIENT CONCENTRATION GUIDELINES OR STANDARDS BY POLLUTANT

POLLUTANT: CHROMIUM CAS #: 7440-47-3

AGENCY	CONCEN	UNITS	AVG TIME	COMMENTS *
CA-MONT.	0.0000			N
CT	2.5000	UG/M3	8HR.	Y
MA	0.0680	UG/M3	24HR.	Y
MT	0.3900	UG/M3	24-HR	Y
MT	0.0700	UG/M3	ANNUAL	Y
NC	0.0000	UG/M3	ANNUAL	N
NV	0.0120	MG/M3	8HR.	N
NY	0.1670	UG/M3	1YR.	N
PA-PHIL.	0.1200	UG/M3	1YR.	N
RI	0.0900	NG/M3	ANNUAL	Y

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 3.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 11 MENU

Figure 9. Example Data Screen Showing Acceptable Ambient Concentrations, Units, and Averaging Times for a Selected Pollutant.

REPORT 11. ACCEPTABLE AMBIENT CONCENTRATION GUIDELINES OR STANDARDS BY POLLUTANT

POLLUTANT: CHROMIUM CAS #: 7440-47-3

AGENCY	OEL BASED	SOURCES ACGIH	SOURCES OSHA	SOURCES NIOSH	UNCERTAINTY FACTOR	OTHER BASES RES	OTHER BASES ADOPT	OTHER BASES OTHER	COMMENTS *
CA-MONT.					0.0000				N
CT	Y	Y	Y	Y	200.0000	N	N	N	Y
MA	N	N	N	N	0.0000	N	N	N	Y
MT	N	N	N	N	128.0000	N	N	Y	Y
MT	N	N	N	N	714.0000	N	N	Y	Y
NC	Y	Y	N	N	0.0000	N	N	N	N
NV	Y	Y	N	N	42.0000	N	N	N	N
NY	N	N	N	N	0.0000	N	N	Y	N
PA-PHIL.	Y	N	N	N	420.0000	N	N	N	N
RI	N	N	N	N	0.0000	N	N	Y	Y

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 3.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 11 MENU

Figure 10. Example Data Screen Showing Acceptable Ambient Concentration Bases, Sources, and Uncertainty Factors for a Selected Pollutant.

Any blanks in this information may indicate that an agency has established a guideline or standard for the selected pollutant but did not provide information on the bases for the guideline or standard.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 11 menu by entering an "E".

Report 12 - Pollutant Research Data by Pollutant

When you select Report 12 either from the POLLUTANT REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 12 will appear. The menu gives you the same three numbered options as does the menu for Report 11:

(0) Return to Main Reports Menu;
(1) Select Pollutant by Name; and
(2) Select Pollutant by CAS Number.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) or Option (2) you will be prompted to designate either a pollutant name or a CAS number, respectively, as described above (see instructions under the heading "Selecting A Pollutant"). After you designate a pollutant either by pollutant name or by CAS number, a data screen will appear which repeats the pollutant name and CAS number and lists agencies which have conducted research on this pollutant, the type of research, whether or not the research is documented in a report, and whether or not the agency has submitted comments on their pollutant research activities. Comments can be viewed by accessing Report 4: Pollutant Research Data by Agency. Figure 11 shows an example of this data screen for 2,3,7,8-Tetrachlorodibenzodioxin.

The type of research is indicated by two-letter acronyms and/or by a five-character field for other. Due to space limitations, the acronyms are not defined on the screen. They are:

REPORT 12. POLLUTANT RESEARCH DATA BY POLLUTANT

POLLUTANT: TETRACHLORODIBENZODIOXIN,2,3,7,8-,P- CAS #: 1746-01-6

	RESEARCH TYPE										
AGENCY	HA	SA	EA	TT	ES	MS	EF	RA	OTHER	DOC?	COMMENTS *
CA			EA					RA		Y	N
CT	HA							RA	RM	Y	Y
IN-INNAP		SA					EF	RA		Y	N

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 4.
PRESS <R> TO CONTINUE OR 'E' TO SELECT ANOTHER POLLUTANT

Figure 11. Example Data Screen Showing Pollutant Research Data for a Selected Pollutant.

HA	Health Assessment	ES	Epidemiological Study
SA	Source Assessment	MS	Monitoring Study
EA	Exposure Assessment	EF	Emission Factor Development
TT	Toxicity Testing	RA	Risk Assessment

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN KEY or you can exit to the Report 12 menu by entering an "E".

SOURCE REPORTS

Source-specific information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the SOURCE INFORMATION category. Each report in this group retrieves certain source-specific State and local agency data for SIC Codes specified by the user. If you wish to retrieve all available information from State and local agencies about a certain category of sources, use this group of reports. Available reports include:

1. Report 16 - Standard Industrial Classification (SIC) Code Descriptions;
2. Report 17 - Permitting Information by SIC Code; and
3. Report 18 - Source Testing Information by SIC Code.

Selecting a Source Category

When using this group of report programs you will need to designate a category of sources about which you wish to retrieve information. Source-specific information is indexed in the data base by SIC Code. The SIC Code was developed by the Federal government (U.S. Department of Commerce) for use in the classification of establishments by type of activity in which they are engaged. The classification is structured on a hierarchical two-digit, three-digit, and four-digit industry code basis, according to the level of industry detail. The two-digit number stands for the major industrial group (e.g., primary metal industries), the three-digit number for the group (e.g., primary non-ferrous metals), and the four-digit number for the industry (e.g., primary aluminum). Therefore, a four-digit number defines a category of sources more narrowly than does a three-digit or a two-digit number. Appendix E provides a complete list of SIC codes and industry descriptions.

You may access the source-specific information in the data base by entering a two-digit, three-digit, or a four-digit SIC Code. If you designate a two-digit SIC Code (e.g, 28), the computer will search for information indexed by that two-digit number, as well as three-digit and four-digit numbers (e.g., 281 and 2824) in the same group. If you designate a four-digit SIC Code, the computer will search only for information indexed by that four-digit number.

When you execute a report program from this group to select source-specific information by SIC Code, you will see the prompt:

ENTER 2-, 3-, OR 4-DIGIT SIC CODE (OR <R> TO EXIT):

- In the space provided, type in the SIC Code which best represents the industry group about which you wish to retrieve information. Consult Appendix E to determine the appropriate SIC Code. Strike the RETURN key.

If the computer finds information in the data base about the source category you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the source category you selected, a message will appear on the top of your screen which informs you that no record was found. You may want to execute the search again using the SIC Code of a larger or similar group of sources.

Example Reports

Step-by-step instructions are provided for the following report:

- Report 18 - Source Testing Information by SIC Code.

When you are familiar with this report program you should have no problem executing the other report programs in this group.

Report 18 - Source Testing Information by SIC Code

When you select Report 18 either from the SOURCE REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 18 will appear. The menu gives you three numbered options:

(0) Return to Main Reports Menu;
(1) View List of Source Tests for a Specific SIC Code; and
(2) View Source Test Information via Access # From (1).

Enter the number which corresponds to the option you wish to select.

Note that the access number mentioned in Option (2) is a unique number assigned by the data base to each source test. To obtain an access number you must execute Option (1) to view a list of tested facilities and selected information about the source tests, including the internally-generated access number. If you wish to obtain a more complete description of any particular source test, use the access number and execute Option (2).

If you select Option (1) you will be prompted to enter a two-, three-, or four-digit SIC Code as described above (see instructions under the heading "Selecting a Source Category"). After you designate an SIC Code, a screen will appear which repeats the SIC Code and lists agencies which have conducted source tests on facilities in the SIC category selected. The screen also provides the four-digit SIC Code of the tested facility, the facility category, whether or not the source test is notable (not routine), and the access number. Figure 12 shows an example of this screen from the data base for SIC 4953 (refuse systems).

If the list continues to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 18 menu by entering an "E". Remember to make note of access numbers of interest. You need to use the access number to retrieve a more complete description of a specific source test under Option (2).

If you select Option (2) from the Report 18 menu to view source test information via the access number, you will be prompted to enter a five-digit access number. After you type in an access number in the space provided and strike the RETURN key, a screen will appear which reports the access number and provides detailed information about the source test. Information provided on this screen includes the agency name, source test contact and telephone number, facility category, four-digit SIC Code, test date, test ID number, sampling technique, analytical method, whether or not the test is notable (not routine) and narrative comments. Figure 13 shows an example of this screen from the data base for access number 73665, a source test conducted by the California Air Resources Board.

REPORT 18. TESTED SOURCES

SIC: 4953

NOTABLE	AGENCY	SIC	FACILTY CATEGORY	ACCESS
	AL	4953	MUNICIPAL INCINERATOR	99789
Y	CA	4953	EMISSIONS FROM FLARE USED FOR COMBUSTION	73665
Y	CA	4953	EMISSION FROM GAS TURBINE FUELED WITH GA	73664
Y	CA	4953	EMISSIONS FROM FLARE USED FOR COMBUSTION	73663
	CA-SCAQMD	4953	HAZARDOUS WASTE MANAGEMENT FACILITY	99848
	CA-SCAQMD	4953	HAZARDOUS WASTE MANAGEMENT FACILITY	99847
	CA-SCAQMD	4953	FLUID TREATMENT PLANT	99844
	CA-SCAQMD	4953	TREATMENT OF NON-HAZARDOUS LIQUID WASTES	99822
Y	MN	4953	3 M CHEMOLITE INCINERATOR	99792
Y	OK-TULSA	4953	MUNICIPAL TRASH INCINERATOR	73718
	OR	4953	MUNICIPAL SOLID WASTE INCINERATION	99862
	OR	4953		98995

NOTE ACCESS #'S OF INTEREST.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU

Figure 12. Example Data Screen Listing Source Tests for a Selected SIC Code.

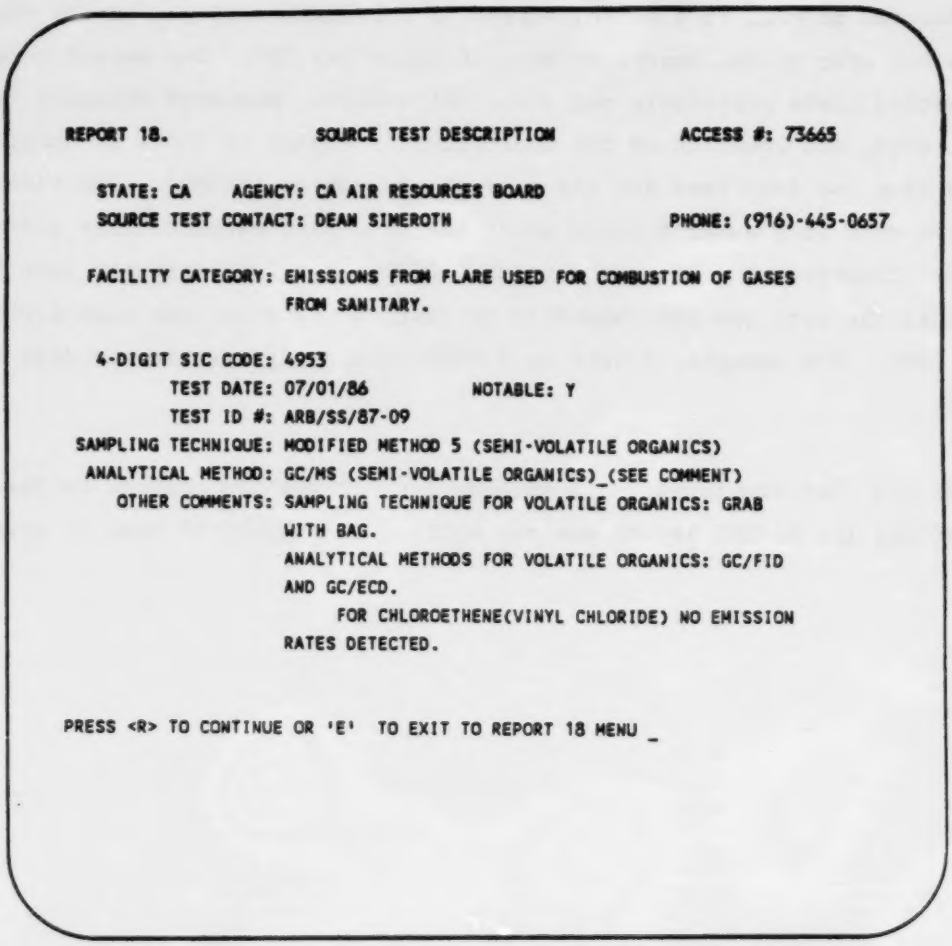

REPORT 18. SOURCE TEST DESCRIPTION ACCESS #: 73665
STATE: CA AGENCY: CA AIR RESOURCES BOARD
SOURCE TEST CONTACT: DEAN SIMEROTH PHONE: (916)-445-0657
FACILITY CATEGORY: EMISSIONS FROM FLARE USED FOR COMBUSTION OF GASES FROM SANITARY.
4-DIGIT SIC CODE: 4953
TEST DATE: 07/01/86 NOTABLE: Y
TEST ID #: ARB/SS/87-09
SAMPLING TECHNIQUE: MODIFIED METHOD 5 (SEMI-VOLATILE ORGANICS)
ANALYTICAL METHOD: GC/MS (SEMI-VOLATILE ORGANICS)_(SEE COMMENT)
OTHER COMMENTS: SAMPLING TECHNIQUE FOR VOLATILE ORGANICS: GRAB WITH BAG.
ANALYTICAL METHODS FOR VOLATILE ORGANICS: GC/FID AND GC/ECD.
FOR CHLOROETHENE(VINYL CHLORIDE) NO EMISSION RATES DETECTED.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU _

Figure 13. Example Data Screen Describing a Selected Source Test.

You can proceed to a second screen of information if you strike the RETURN key or you can exit to the Report 18 menu if you enter "E". The second screen of information lists pollutants measured, CAS numbers, measured emission rates and units, SCCs, and location of the measurement. Figure 14 shows an example of this screen from the data base for the same access number (73665). The field for emission rate is a numeric field which the data base automatically prefills with 0.0000. Therefore an emission rate of 0.0000 may not necessarily mean 0. It may mean that the rate was not submitted or that the rate is less than 0.0001 (1/10,000). For example, a rate of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 18 menu by entering an "E".

REPORT 18. SOURCE TEST DESCRIPTION

STATE: CA AGENCY: CA AIR RESOURCES BOARD
TEST ID #: ARB/SS/87-09

POLLUTANT	CAS#	EM RATE	UNIT	SCC	LOCATION
BENZENE	71-43-2	0.0028	LB/HR	4-90-900	FLARE EXHAUST STA
CARBON TETRACHLORIDE	56-23-5	0.0000	LB/HR	UNKNOWN	FLARE EXHAUST STA
DIOXINS	CL-DIOXIN	0.0000	LB/HR	UNKNOWN	FLARE EXHUAST STA
TOLUENE	108-88-3	0.0009	LB/HR	UNKNOWN	FLARE EXHAUST STA
TRICHLOROETHANE,1,1,	71-55-6	0.0001	LB/HR	UNKNOWN	FLARE EXHAUST STA
VINYL CHLORIDE	75-01-4	0.0040	LB/HR	UNKNOWN	FLARE EXHUAST STA

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU

Figure 14. Example Data Screen Showing Pollutant-Specific Information for a Selected Source Test.

BIBLIOGRAPHIC CITATIONS AND ONGOING RESEARCH

References to published documents and ongoing research and regulatory development projects in the area of air toxics provided by State and local agencies, EPA, and other Federal and International organizations can be retrieved using one report:

Report 19 - Bibliographic Citations and Ongoing Research.

The report allows you to search for relevant references using a combination of search criteria, including pollutant name, CAS number, SIC Code, reference type, and/or sponsor. You can also retrieve citations and abstracts to a specific document or project if you know its document number. Step-by-step instructions for Report 19 follow.

When you select Report 19 either from the BIBLIOGRAPHIC CITATIONS AND ONGOING RESEARCH menu or directly from the REPORT SELECTION menu, a menu screen for Report 19 will appear. The menu screen gives you the option to select:

(1) Report by Keyword, or
(2) Report by Document Number.

It also allows you to return to the parent menu (by striking the RETURN key), quit reports and end session (by entering "QU"), or to return to the HOME menu (by entering HO).

If you select Option (1), a screen will appear which allows you to designate search criteria. Figure 15 shows this screen on which SIC Code 49 (Electric, Gas, and Sanitary Services) and reference type SA (Source Assessment) have been entered.

Use the TAB key to move from field to field and enter search criteria according to the focus of your search. You can designate either a pollutant name or CAS number, an SIC Code, a reference type, and a sponsor acronym. If you do not wish to restrict your search for a particular search criteria, leave the field blank or enter "ALL". Appendix D lists Clearinghouse identifiers for chemical groups which can be used in place of CAS numbers. Appendix E provides a complete list of SIC Codes and industry descriptions.

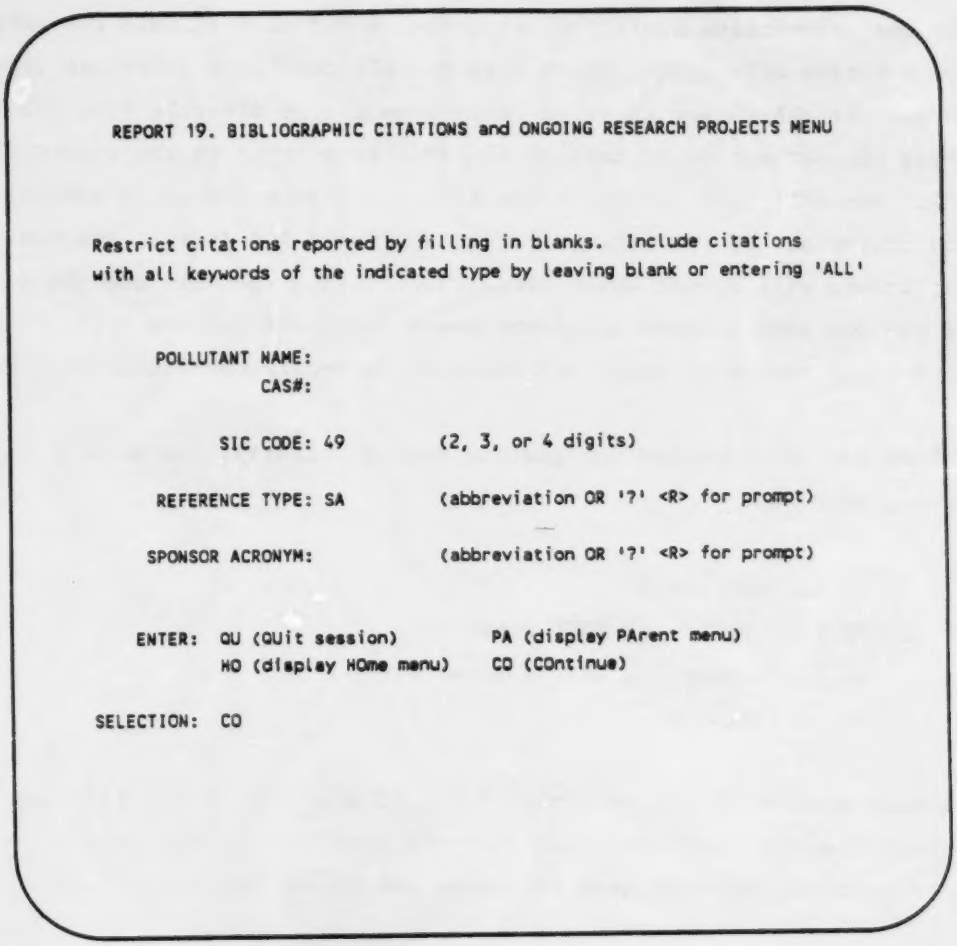

REPORT 19. BIBLIOGRAPHIC CITATIONS and ONGOING RESEARCH PROJECTS MENU
Restrict citations reported by filling in blanks. Include citations
with all keywords of the indicated type by leaving blank or entering 'ALL'
POLLUTANT NAME:
CAS#:
SIC CODE: 49 (2, 3, or 4 digits)
REFERENCE TYPE: SA (abbreviation OR '?' <R> for prompt)
SPONSOR ACRONYM: (abbreviation OR '?' <R> for prompt)
ENTER: QU (QUit session) PA (display PArent menu)
HO (display HOme menu) CO (COntinue)
SELECTION: CO

Figure 15. Example Search Criteria Screen for the Bibliographic Citations and Ongoing Research Report.

For information on available reference types and/or sponsor acronyms, enter a "?" in the appropriate field. If you enter a "?" in the field for reference type, a prompt screen will appear which displays all available reference types and their acronyms. It allows you to select a reference type directly from the list by entering the acronym or to include all reference types in the report (by entering "ALL"). You will then return to the search criteria screen to continue designating search criteria. If you enter a "?" in the field for sponsor acronym, a similar prompt screen will appear which displays available sponsors and their acronyms and gives you the same choices discussed above for the reference type prompt screen. Table 5 lists reference types and sponsors currently available.

When you are finished designating search criteria, the menu gives you the following options:

QU to quit session;
HO to display the HOME menu;
PA to display the parent menu; or
CO to continue.

The cursor must be in the selection field to make any of these choices. The selection field is prefilled with "CO" (to continue) as the default action. If you wish to continue you only need to strike the RETURN key.

If you continue, a summary screen will appear which lists the search criteria you designated and reports the number of bibliographic citations found and the number of ongoing research projects found. Figure 16 shows an example of this screen from the data base with the same search criteria designated: SIC 49 (Electric Gas, and Sanitary Services) and reference type SA (Source Assessment). It shows that 16 bibliographic citations and 13 ongoing research projects were found. Your options at this point are to enter:

CI to view bibliographic citations only;
OR to view ongoing research projects only;
BO to view both bibliographic citations and ongoing research projects;
PA to display the parent menu;
HO to display the HOME menu; and
QU to quit the session.

TABLE 5. REFERENCE TYPES AND SPONSORS

REFERENCE TYPES

AM	Ambient Monitoring
CHIP	Chemical Hazard Information Profile
CS	Case Study
CT	Control Technology Document
DM	Dispersion Modeling
EA	Exposure Assessment
EF	Emission Factor Development
ER	Emergency Response
ES	Epidemiological Study
FR	Federal Register Notice
HA	Health Assessment
IA	Indoor Air
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standard
OT	Other
PD	Support Document for Air Toxics Program Development
PRA	Pre-Regulatory Assessment
RA	Risk Assessment
RDG	Regulatory Development Guide
RR	Regulations or Rules
SA	Source Assessment
SS	Source Sampling
TT	Toxicity Testing

SPONSORS

EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
NAS	National Academy of Sciences
NCI	National Cancer Institute
NIEHS	National Institute of Environmental Health Sciences
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
STATE/LOC	State or Local Agency
WHO	World Health Organization

```
REPORT 19.  BIBLIOGRAPHIC CITATIONS and ONGOING RESEARCH PROJECTS SUMMARY

        SEARCH CRITERIA:
        ----------------
         POLLUTANT NAME:
                 CAS #:
              SIC CODE:  49
         REFERENCE TYPE:  SA
        SPONSOR ACRONYM:

                RESULTS:
                --------
  BIBLIOGRAPHIC CITATIONS:        16
ONGOING RESEARCH PROJECTS:        13

    ENTER: CI (view bibliographic CItations only)
           OR (view Ongoing Research projects only)
           BO (view BOth bibliographic citations and ongoing research projects)
           PA (display PArent menu)  HO (display HOme menu)
           QU (QUit the session)

SELECTION: BO
```

Figure 16. Example Summary Screen for the Bibliographic Citations and Ongoing Research Report.

The system prefills the selection field with "BO", "CI", "OR", or "PA", depending on whether it finds both bibliographic citations and ongoing research projects, only bibliographic citations, only research projects, or neither.

If you choose to scroll through the bibliographic citations, the research projects, or both, on every screen you have the option to continue to the next screen (by entering "CO"), quit the session (by entering "QU"), return to the HOME menu (by entering HO), or return to the parent menu (by entering "PA"). Figures 17 and 18 show an example bibliographic citation and abstract from the data base found using the search criteria designated on the screen in Figure 16. Figure 19 shows an example ongoing research project description found in the same group. The bibliographic citation and the ongoing research project description can extend to more than one screen depending on the number of keywords that reference the document or project.

You can also retrieve a specific citation/abstract or ongoing research description if you know the document or project number which references the document or project in the data base. The document number is usually the number assigned by the National Technical Information Service (NTIS) if published by NTIS or the number assigned by the sponsoring agency.

To select by document number, go to Option (2) from the Report 19 menu (Report by Document Number). After you execute this option, a prompt will appear which directs you to enter a document number (or strike the RETURN key). To retrieve a citation/abstract or ongoing research description you must enter the document/research number exactly as it appears in the data base (including dashes, spaces, and other characters). For this reason, this option is useful only if you have an exact reference to a document or research number and wish to view a citation and abstract or research description for that document or research project.

REPORT 19. BIBLIOGRAPHIC CITATION FOR: PB80-219421
Environmental Assessment of a Waste-to-Energy Process: Braintree Municipal Incinerator
EPA, Cincinnati, OH, IERL
Midwest Research Institute
M. Golembiewski, et al.
Aug 80, 230p, EPA-600/7-80-149, PC A11/MF A01
Keywords that reference this project are:
CL-PM PARTICULATE MATTER
CL-POM POLYCYCLIC ORGANIC MATTER
EPA ENVIRONMENTAL PROTECTION AGENCY
SA SOURCE ASSESSMENT
10024-97-2 NITROUS OXIDE
11097-69-1 AROCLOR 1254
1336-36-3 POLYCHLORINATED BIPHENYLS
49 ELECTRIC, GAS, AND SANITARY SERVICES
ENTER: 'QUit', 'HOme', 'PArent', 'ABstract', 'COntinue' CO

Figure 17. Example Data Screen Showing a Bibliographic Citation for a Published Document.

REPORT 19. BIBLIOGRAPHIC CITATION FOR REF: PB80-219421

Abstract: Midwest Research Institute conducted an array of field tests at the Braintree Municipal Incinerator facility in Braintree, Massachusetts for the purpose of providing data on multimedia emissions to help determine adverse environmental impact and pollution control technology needs. There are two incinerators at the Braintree facility: both are of the waterwall type and are designed to burn unprocessed mixed municipal refuse at a rate of 120 tons/day each. Air pollution control is provided by electrostatic precipitators. Primary emphasis was placed on evaluating air emissions. Analyses were carried out for criteria pollutants as well as for potentially hazardous compounds such as polychlorinated biphenyls and polycyclic aromatic hydrocarbons. The Environmental Protection Agency-designed Source Assessment Sampling System train was also used as per the Environmental Protection Agency's Level 1 environmental assessment protocol. The data obtained were used to evaluate emissions in each effluent stream on the basis of existing standards or criteria and also through the use of the Environmental Protection Agency's recently devised Source Analysis Model (SAM-1A).

ENTER: 'QUit','HOme','PArent','COntinue' CO

Figure 18. Example Data Screen Showing an Abstract for a Published Document.

REPORT 19. ONGOING RESEARCH FOR: CL-BIB-0055
TITLE: Potential for Air Releases From CERCLA Sites
STATUS: Started 7/85; Complete 6/87
CONTACT: OERR/HSC, S. Caldwell (202) 382-4485
CAS NO: CL-HAZWAST
CHEMICAL: HAZARDOUS WASTES
SOURCE: Hazardous Waste Facilities, Spills, Etc.
Keywords that reference this project are:
CL-HAZWAST HAZARDOUS WASTES
EPA ENVIRONMENTAL PROTECTION AGENCY
SA SOURCE ASSESSMENT
49 ELECTRIC, GAS, AND SANITARY SERVICES
495 SANITARY SERVICES
ENTER: 'QUit', 'HOme', 'PArent', 'COntinue' CO

Figure 19. Example Data Screen Showing a Description of an Ongoing Research Project.

RISK ANALYSIS REPORTS

Selected EPA risk analysis results can be retrieved using one report:

Report 21 - Selected EPA Risk Analysis Information.

The report allows you to search for EPA risk data by pollutant, by SIC Code, or by State.

The EPA performs dispersion modeling of emission sources of air toxics in support of decisions on the need to regulate these sources under the Clean Air Act (CAA). A tiered modeling approach is used wherein EPA first makes a rough estimation of population risks resulting from ambient air exposure to the pollutants under evaluation. Following the publication of a regulatory decision (e.g., "intent to list" notice), a more thorough examination of specific sources is conducted in deciding whether to actually list the pollutant and subsequently propose Federal regulations (e.g., national emissions standard for hazardous air pollutants (NESHAP)). This includes verification of emissions, plant site, plant parameters and habitability of the area surrounding high risk facilities.

This report program presents selected EPA risk analysis results. Risk analysis procedures are performed by EPA for known or suspected carcinogens, as well as for chemicals not believed to be carcinogenic. This information is provided in response to requests by State and local agencies for ready access to EPA risk assessment information. Additional source-specific information may be found in the public dockets for the individual pollutants.

The quantitative cancer risk estimates are produced by combining the unit cancer risk factor with estimates of population exposure. The cancer risk results are presented as the predicted lifetime cancer incidence expressed as cancer cases per year (annual incidence), and as the lifetime cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentrations (maximum individual risk) expressed as the probability of getting cancer in one's lifetime.

There are many sources of uncertainty inherent in risk estimation that impact the confidence that can be placed upon the estimates. These include uncertainties resulting from the derivation of the unit cancer risk factor and the assumptions incorporated into the exposure analysis procedures. Note that the risk estimates are subject to change as new information is obtained. In general, risk estimates provide a relative, not absolute, index to the extent of potential risk between facilities and/or source types. The estimates should be regarded as, at best, a rough estimate of the actual risk to exposed populations and should not be used alone as a basis for regulatory decision making. For further information on the risk estimation procedure or an interpretation of the results contact the Clearinghouse staff at (919) 541-0850, FTS 629-0850. Step-by-step instructions for Report 21 follow.

When you select Report 21 either from the SELECTED EPA RISK ANALYSIS INFORMATION menu or directly from the REPORT SELECTION menu, you will come to the first of two screens of information about the risk analysis process. Review the information for an understanding of the derivation and meaning of the risk analysis data and proceed to the menu screen for Report 21 by striking the RETURN KEY. The menu screen gives you four numbered options:

(0) Return to Main Reports Menu;
(1) View by Pollutant;
(2) View by SIC Code; and
(3) View by State.

Enter the number which corresponds to the option you wish to select.

If you select Option (1), a prompt will appear which gives you the option to select a pollutant by pollutant name or by CAS number. The procedure to select a pollutant is the same as the procedure described above for reports in the POLLUTANT INFORMATION category. (See instructions under the heading "Selecting a Pollutant" in the subsection on Pollutant Reports). After you designate a pollutant either by pollutant name or by CAS number, a data screen will appear which repeats the pollutant name and CAS number, shows the EPA unit cancer risk factor for the pollutant, and provides risk data for sources of the selected pollutant for which EPA has developed pollutant-specific risk estimates. Information on the screen

includes plant name; SIC Code; city or county and State; total emissions in kg/yr; predicted maximum concentration in ug/m^3; maximum individual cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentrations, expressed as the probability of getting cancer in one's lifetime (maximum individual risk); the predicted lifetime cancer incidence, expressed as cancer cases per year (annual incidence); date of estimate; and whether or not the location and/or other input parameters are unverified. Figure 20 shows an example of this data screen for 1,3-Butadiene.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

If you select Option (2) from the menu screen to view by SIC Code, you will retrieve similar risk data sorted by source category. A prompt will appear which directs you to enter a two-, three-, or four-digit SIC Code. The procedure to select a source category is the same as the procedure described above for reports in the SOURCE INFORMATION category. (See instructions under the heading "Selecting a Source Category" in the subsection on Source Reports). After you designate a source category by SIC Code, a data screen will appear which reports the SIC Code and industry category description, and provides risk data for sources in the SIC classification selected for which EPA has developed pollutant-specific risk estimates. Information on the screen includes pollutant, plant name, city or county and State, total emissions in kg/yr, predicted maximum concentration in ug/m^3, maximum individual risk, annual incidence, date of estimate, and whether or not the location and/or other input parameters are unverified. Figure 21 shows an example of this data screen for SIC 283 (Drugs).

Since the space available on the screen for pollutant name is limited to 10 characters, the pollutant name may be truncated. For this reason you have the option to view the CAS number and full name of any pollutant on the screen. To execute this option, enter the number to the left of the pollutant in the space provided and strike the RETURN key. The CAS # and full pollutant name will appear. On the screen shown in Figure 21, the number "8" was entered at the cursor location (next to the INDEX prompt) to reveal the CAS number (75-09-2) and full pollutant

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

POLLUTANT: BUTADIENE,1,3-
CAS #: 106-99-0 UNIT RISK: 0.0002800

SIC	PLANT NAME	CITY OR COUNTY	ST	TOTAL EM KG/YR	MAX CONC UG/M3	MAX INDIV RISK	ANNUAL INCID	DATE MM/YY	Q A
28	GEN CORP.	ODESSA	TX	49020	6.1E+01	2E-02	0.1618	05/86	
28	B.F. GOODRI	PORT NECHES	TX	109400	1.3E+02	4E-02	0.1790	05/86	
28	GOODYEAR	HOUSTON	TX	152400	1.9E+02	5E-02	2.1850	05/86	
28	UNIROYAL	PORT NECHES	TX	101300	1.4E+02	4E-02	0.1700	05/86	
28	BORG-WARNER	WASHINGTON	WV	399500	2.4E+02	7E-02	0.5700	05/86	
28	DOW	DALTON	GA	297700	1.9E+02	5E-02	0.3080	05/86	
28	DOW	FREEPORT	TX	22909	1.1E+00	3E-04	0.0122	05/86	
28	DOW	GALES FERRY	CT	16900	1.6E+01	5E-03	0.0590	05/86	
28	DOW	MIDLAND	MI	48520	2.0E+01	6E-03	0.0860	05/86	
28	DOW	PITTSBURG	CA	12600	2.5E+00	7E-04	0.0360	05/86	
28	GEN CORP.	MOGADORE	OH	51770	3.9E+01	1E-02	0.1416	05/86	

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 21 MENU

Figure 20. Example Data Screen Showing EPA Risk Analysis Information for a Selected Pollutant.

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

SIC CODE: 283
DESCRIPTION: DRUGS

	POLLUTANT	PLANT NAME	CITY OR COUNTY	ST	TOTAL EM KG/YR	MAX IND RISK	ANNUAL INCID	DATE MM/YY	Q A
1	CARBON TETRA	ABBOTT LABS	NORTH CHIC	IL	218	4E-06	0.0001	07/86	
2	CHLOROFORM	HOFFMAN LaR	NUTLEY	NJ	30717	5E-04	0.0040	07/86	
3	CHLOROFORM	HOFFMAN LaR	BELVIDERE	NJ	236201	2E-03	0.0420	07/86	
4	CHLOROFORM	MERCK	RAHWAY	NJ	43844	6E-04	0.0920	07/86	
5	CHLOROFORM	SCHERING CO	UNION	NJ	6423	2E-04	0.0210	07/86	
6	ETHYLENE DIC	BEECHAM	PISCATAWAY	NJ	2006	2E-05	0.0026	07/86	
7	ETHYLENE DIC	MERCK	RAHWAY	NJ	136	1E-06	0.0003	07/86	
8	METHYLENE CH	ABBOTT LABS	NORTH CHIC	IL	17502	1E-05	0.0019	07/86	
9	METHYLENE CH	ABBOTT LABS	NORTH CHIC	IL	8862	4E-05	0.0011	07/86	

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED

To view CAS # and full name of a pollutant above
enter number from list above or <R> to continue

INDEX 8 CAS #: 75-09-2 NAME: METHYLENE CHLORIDE

Figure 21. Example Data Screen Showing EPA Risk Analysis Information for a Selected SIC Code.

name (methylene chloride). You can repeat this procedure as many times as necessary.

If the list continues on to another screen, as always you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

If you select Option (3) from the menu screen to view by State, you again will retrieve similar risk data sorted by State. A prompt will appear which directs you to enter a two-letter State abbreviation. After you enter a two-letter State abbreviation, a data screen will appear which repeats the State and provides risk data for sources located in the State selected for which EPA has developed pollutant-specific risk estimates. The data again include pollutant, plant name, city or county, SIC Code, total emissions in kg/yr, predicted maximum concentration in ug/m^3, maximum individual risk, annual incidence, date of estimate, and whether or not the location and/or other input parameters are unverified. As before, you have the option to view the CAS number and full name of any pollutant on the screen. Figure 22 shows an example of this data screen for the State of Georgia.

Again, if the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

STATE: GA

	POLLUTANT	PLANT NAME	CITY OR COUNTY	SIC	TOTAL EM KG/YR	MAX IND RISK	ANNUAL INCID	DATE MM/YY	Q A
1	BUTADIENE,	DOW	DALTON	28	297700	5E-02	0.3080	05/86	
2	BUTADIENE,	GOODYEAR	CALHOUN	28	43915	2E-02	0.0570	05/86	
3	BUTADIENE,	REICHHOLD	KENSINGTON	28	285300	8E-02	0.4880	05/86	
4	CADMIUM	CHLORIDE ME	COLUMBUS	33	0	8E-07	0.0001	06/87	*
5	CADMIUM	NATIONAL SM	ATLANTA	33	0	1E-06	0.0002	06/87	*
6	CADMIUM	NATIONAL SM	PEDRICKTOW	33	0	3E-06	0.0008	06/87	*
7	CADMIUM	TARACORP	ATLANTA	33	0	2E-06	0.0006	06/87	*
8	CARBON TET	Dow Chemica	Dalton	28	2783	8E-05	0.0002	05/86	*
9	CHLOROFORM	CONTINENTAL	AUGUSTA	26	65919	2E-03	0.0021	04/86	*

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED

To view CAS # and full name of a pollutant above
enter number from list above or <R> to continue

INDEX CAS #: NAME:

Figure 22. Example Data Screen Showing EPA Risk Analysis Information for a Selected State.

PERMITTING INFORMATION REPORTS

Selected subsets of State and local agency permitting information can be retrieved using one report:

Report 22 Permitting Information Report.

This report allows you to search for permitting information using a combination of search criteria, including CAS number, pollutant name, SIC Code, and year permit was issued/last amended. You can also retrieve descriptions of specific permits by entering an access number, as described for Report 18 Source Testing Information by SIC Code, in the subsection on SOURCE REPORTS.

This report retrieves the same information as does Report 7 Permitting Information by Agency, Report 13 Permitting Information By Pollutant, and Report 17 Permitting Information By SIC Code, with the exception that Report 7 also displays whether or not the agency renews permits, and if so, the frequency of renewal. However, Report 22 is more flexible because you can designate more than one search criterion. Use this report if the focus of your search involves more than one search criterion. Step-by-step instructions for Report 22 follow.

When you select Report 22 from the PERMITTING INFORMATION REPORTS menu, a Search Criteria menu will appear. It allows you to enter an access number or search criteria. Use the access number to view a detailed permit description for a specific permit only after you have reviewed permitting information using search criteria and noted access numbers for permits about which you would like more information.

To specify search criteria, use the TAB to move the cursor to the search criterion of choice. If you would like to search by pollutant, enter either a CAS number or a pollutant name, but not both. You can designate only one pollutant at a time. Instructions for selecting a pollutant are given in the subsection on POLLUTANT REPORTS under the heading "Selecting a Pollutant".

If you would like to search by source category, enter the appropriate SIC Code in the space provided. For a discussion about SIC Codes, go to the subsection on SOURCE REPORTS under the heading "Selecting a Source Category." Consult Appendix E for a complete listing of SIC Codes and industry descriptions.

If you would like to search by the year the permit was issued/last amended, enter a four-digit year (e.g., 1983). The computer will search the permitting information files for permits issued or amended during the year you designate or later.

When you are finished designating search criteria, the menu gives you the following options:

CO to Continue; and
PA to return to the parent menu.

The selection field is pre-filled with "CO" (to continue) as the default action. If you wish to continue with the search, you only need to strike the RETURN key. If you decide to suspend the search you can TAB down to the selection field, enter "PA" and strike the RETURN key to return to the parent menu.

If you continue, the next screen you see lists the search criteria you designated, specifies the number of permits which satisfy the search criteria, and gives you the option to modify the search criteria. Figure 23 shows an example of this screen with several search criteria designated: arsenic, SIC 2879 (Agricultural Chemicals, NEC), and 1974. It also shows that 3 permits were found which satisfy these search criteria. The listed options include:

CO to continue viewing permits;
MO to modify search criteria; and
PA to return to parent menu.

Again the selection field is pre-filled with "CO" (to continue). If you wish to view the permitting information selected based on the search criteria you designated, you only need to strike the RETURN key. If, however, the search identi-

PERMITTING INFORMATION
SEARCH CRITERIA MENU
Use TAB key to move cursor
ENTER ACCESS ID: ____
OR
SEARCH CRITERIA:
CAS: 7440-38-2
POLLUTANT NAME: ARSENIC
4-DIGIT SIC CODE: 2879
>=YEAR ISSUED/LAST AMENDED: 1984
ENTER: 'CO' to COntinue viewing permits
'MO' to MOdify search criteria
'PA' to return to PArent menu
SELECTION: CO
The number of permits satisfying the search criteria is 3

Figure 23. Example Search Criteria Screen for the Permitting Information Report.

fied a large number of permits, you may wish to modify the search criteria. You can do this by entering MO (to modify the search criteria) and striking the RETURN key. You can now use the TAB key to move up and down the search criteria fields. Add, delete (using the SPACE bar), or modify (by overtyping) the search criteria until you are satisfied. Then you can strike the RETURN key to execute the default selection of "CO" (to continue). Again, you can alternately TAB to the selection field and enter "PA" to suspend the search and return to the parent menu.

If you continue, a data screen will appear which displays the search criteria you designated and provides information on permits which satisfy the search criteria. Information includes the facility category, SIC Code, SCC, pollutant, agency, year the permit was issued/last amended, emission limits and units, whether or not permit is notable (not routine), and access number. The exact format of the information on the screen will depend on the search criteria you designate. For example, if you designate a pollutant as a search criteria, the pollutant name and CAS number will appear at the top of the screen and not in the body of the information table. However, if you do not designate a pollutant as a search criteria, the pollutant name and CAS number will necessarily occupy a column in the information table. Figure 24 shows an example of this data screen from the data base for the search criteria designated on the screen in Figure 23.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Selection Criteria menu by entering an "E". Remember to make note of access numbers of interest. You can use the access number to retrieve a more complete description of a specific permit from the Selection Criteria menu.

If you enter an access number in the appropriate field on the Selection Criteria menu and strike the RETURN key, a screen will appear which repeats the access number and provides detailed information about the permit. Information on the screen includes the agency name, permitting contact and telephone number, facility category, SIC code, year permit was issued, last year amended, permit ID number, control equipment, whether or not the permit is notable (not routine), and narrative comments. Figure 25 shows an example of this screen from the data base, for access number 73807, a permit issued by the Georgia Department of Natural Resources, Air Protection Branch.

PERMITTING INFORMATION

CAS #: 7440-38-2 PRIMARY NAME: ARSENIC
SIC CODE: 2879 INDUSTRY: AGRICULTURAL CHEMICALS, NEC

NOTABLE	FACILITY CATEGORY	SCC	AGENCY	YEAR	EMISSIONS	UNITS	ACCESS
Y	CCA MIX PLANT	UNKNOWN	GA	1987	0.2300	GMS/HR	73807
	ARSONATES UNIT CO	UNKNOWN	TX	1984	0.0218	TNS/YR	95618
Y	CHEMICAL MANUFACT	3-01-033-99	WY	1987	0.0008	G/S	73722

NOTE ACCESS ID'S OF INTEREST.
ENTER <R> TO CONTINUE OR 'E' TO EXIT TO SELECTION CRITERIA MENU

Figure 24. Example Data Screen Showing Permitting Information for Selected Search Criteria.

PERMIT DESCRIPTION
STATE: GA AGENCY: GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH
PERMITTING CONTACT: JOHN W. MITCHELL PHONE: (404)-656-6900
ACCESS #: 73807
FACILITY CATEGORY: CCA MIX PLANT
4-DIGIT SIC CODE: 2879
YEAR PERMIT ISSUED: 1986
LATEST YEAR AMENDED: 1987
PERMIT ID #: 2879-092-9419 NOTABLE PERMIT? Y
CONTROL EQUIPMENT: VENTURI SCRUBBER
OTHER COMMENTS: 10 FOOT STACK, 24 HR/DAY
50 FOOT STACK, 50 HRS/WEEK
PRESS <R> TO VIEW POLLUTANTS OR 'E' TO EXIT TO SEARCH CRITERIA MENU _

Figure 25. Example Data Screen Describing a Selected Permit.

You can proceed to a second screen of information if you strike the RETURN key or you can exit to the Search Criteria menu if you enter "E". The second screen of information lists permitted pollutants, CAS numbers, emission limits and units, SCCs, and sources of emissions subject to the limit. Figure 26 shows an example of this screen from the data base for the same access number (73807). Remember that an emission limit of 0.0000 may not necessarily mean 0. It may mean that the limit was not submitted (the data base prefills numeric fields with 0.0000) or that the limit is less than 0.0001 (1/10,000). For example, a limit of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, once again you can proceed to the next screen by striking the RETURN key or you can exit to the Search Criteria menu by entering an "E".

PERMIT DESCRIPTION - POLLUTANT LIST

STATE: GA AGENCY: GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH
PERMIT ID: 2879-092-9419

POLLUTANT	CAS#	EMISSIONS	UNIT	SOURCE	SCC CODE
ARSENIC AND COMPOUNDS	7440-38-2	0.2300	GMS/HR	CCA MIX TANK	UNKNOWN
CHROMATE, (CRO42-)	13907-45-4	0.0200	GMS/HR	CCA MIX TANK	UNKNOWN
CHROMIC ACID	7738-94-5	0.1700	GMS/HR	CCA MIX TANK	UNKNOWN
COPPER OXIDE, (CUO)	1317-38-0	10.0000	GMS/HR	CCA MIX TANK	UNKNOWN

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO SEARCH CRITERIA MENU _

Figure 26. Example Data Screen Showing Pollutant-Specific Information for a Selected Permit.

APPENDIX A

IF YOU HAVE A PROBLEM

This appendix describes several common problems which you may encounter. If, after trying the solutions suggested here, a problem persists, contact:

1. EPA User's Support (919) 541-7862 or (800) 334-2405
   (If the computer will not accept your password or User ID.)

2. EPA Telecommunications (919) 541-4506 or (800) 334-0741
   (If you are unable to connect with the EPA computer or there is excess noise on the line.)

3. EPA Clearinghouse Staff (919) 541-0850 FTS 629-0850
   John Vandenberg, Beth Hassett, or Nancy Riley
   (If you see on-screen message such as "Security Violation Detected" or any problem not specified above.)

LOGGING ON

At times you may encounter difficulties logging onto the computer. Your computer and software package will have a procedure to move you back to a point at which you can redial. For example, with the Hays Smart Modem or a Hayes-compatible smart modem, you can follow these steps:

- Enter "+++".

When you see "OK" appear on the screen,

- Enter "ATHO" and "RETURN".

Now you can redial your TYMNET number.

SCREEN LOCKED

If you can't move your cursor, the screen has become locked. This might occur as a result of poor communications or because the computer cannot interpret what you have keyed in. To free the cursor:

- Enter "CTRL-R" (i.e., hold the "CTRL" key down and type "R").

When the screen is cleared, you can continue.

CURSOR OUTSIDE DEFINED FIELD

If the cursor moves outside of a defined selection field and becomes "locked":

- First press "CTRL-R" (i.e., hold the "CTRL" key down and type "R") to free the cursor; and
- Use the "TAB" or "REVERSE TAB" key to move the cursor back into an input field.

Now you can continue.

"GARBAGE" ON SCREEN

If random characters suddenly appear on your screen, it is probably caused by poor communications. To remove the "garbage" from the screen:

- Enter "CTRL-R" (i.e., hold the "CTRL" key down and type "R") to free the cursor.

You will now be able to proceed. However, if you are on a screen with a selection or other input field and there is "garbage" in an input field:

- Use the "TAB" key to move to the Selection prompt.
- Exit from the screen by following instructions of the prompt (you will need to enter "0" to return to the Report Selection menu, "E" to exit to a Report menu, "PA" to return to the Parent menu, or some other character(s) depending where you are in the data base. The prompts will guide you. After you exit from the screen you can proceed back to the same screen if you wish to continue.

If the problem persists, you may want to exit from the data base, logoff, and log back on. Your new connection may be improved.

BUMPED OUT OF THE DATABASE

If you are viewing data in the NATICH data base and suddenly see the HOME menu or the REPORT SELECTION menu, you have been bumped out of the data base. This might occur if you allow more than 10 minutes to elapse without transmitting a command. This phenomenon is referred to as "time-out" and occurs because there is a 10-minute limit to periods of inactivity imposed by the library in which the NATICH data base is housed.

If this occurs, you can simply proceed back to the screen from which you were bumped if you wish to continue. You can prevent a time-out if you do not allow a screen to "sit" for more than 10 minutes. If you need to study the data on the screen or would like a record of the data, you may be able to print the screen to a file which you can consult later with no time-out limitation, or to print a hard copy of the screen using a printer. If your computer and terminal emulator software package support this, they will have procedures to accomplish these functions. Consult your hardware and software manuals.

DISCONNECTED FROM THE EPA COMPUTER

If you are disconnected from the EPA computer, you will see a message saying "DISCONNECTED". You can reestablish your connection and return directly to the screen on the terminal when the disconnection occurred. You do not have to redial TYMNET and repeat the log on. The steps to proceed to reestablish the connection will vary depending on your computer and emulator package. Consult your hardware and software users manuals.

MENU CHOICE DOES NOT WORK

Many of the screens offer menu choices at the bottom of the page. These choices must be entered into the Selection field. Otherwise, the data base will display an error message.

APPENDIX B

KEYBOARD USAGE

The cursor is a small blinking square or underline character (_) that appears at the spot where you begin typing your response to a menu selection or entry field. It appears at different locations on different screens, depending on the format of a particular screen. When you communicate interactively with the NATICH data base, the movement of the cursor is limited to specified entry fields. The prompts on the screen guide you with menu selections and labeled fields. You will only need to type a limited number of keys.

The chart below describes certain keyboard functions important to the NATICH data base. The exact key you need to press to perform these functions depends on the keyboard and terminal emulator software you are using. Commonly used keys are listed. A dash (-) between two keys indicates that you must press and hold the first key while you press the second key.

TABLE B-1. KEYBOARD USAGE

Function	Commonly Used Keys*
Moves cursor forward from one field to the next field.	TAB CTRL-I
Moves cursor backward from one field to the previous field.	SHIFT-TAB SHIFT - CTRL-G
Submits input on menus and responses to prompts.	RETURN ENTER TRANSMIT
Unlocks screen and frees cursor to continue when there is a communications problem.	CTRL-R
Moves cursor to the right without deleting characters (nondestructive space forward).	—> (or terminal equivalent)

(Continued)

TABLE B-1. KEYBOARD USAGE (Continued)

Function	Commonly Used Keys*
Moves cursor to the left without deleting characters (nondestructive space backspace).	← (or terminal equivalent)
Moves cursor one line up (in a narrative text only).	↑ (or terminal equivalent)
Moves cursor one line down (in a narrative text only).	↓ (or terminal equivalent)
Moves cursor to the right, deleting character at the position of the cursor.	Space Bar
Moves cursor to the left, deleting character at the position of the cursor.	BACKSPACE ← RUBOUT CTRL-H

*These keys are programmed to work as indicated for some computer keyboards and emulator packages. Consult your hardware and software users manuals to determine which keys will work for you.

APPENDIX C. AGENCY ACRONYMS

STATE	AGENCY	ACRONYM
AK	AK DEPT. OF ENV. CONSERVATION POUCH O JUNEAU, AK 99811 (907)465-2606	AK
AL	AL DEPT. OF ENV. MANAGEMENT STATE CAPITOL MONTGOMERY, AL 36130 (205)271-7861	AL
AR	AR DEPT. OF POLLUTION CONTROL AND ECOLOGY, AIR DIVISION 8001 NATIONAL DRIVE LITTLE ROCK, AR 72209 (501)562-7444	AR
AZ	MARICOPA CO. DEPT. OF HEALTH SER., BUR. OF AIR POLL. CONTROL 1845 E. ROOSEVELT ST. PHOENIX, AZ 85006 (602)258-6381	AZ-PHOENIX
AZ	AZ DEPT. OF HEALTH SERVICES, BUR. OF AIR QUALITY CONTROL 2005 N. CENTRAL PHOENIX, AZ 85004 (602)257-0022	AZ
AZ	AZ PINAL-GILA COUNTIES AIR QUALITY CONTROL DISTRICT P.O. BOX 1076 FLORENCE, AZ 85232 (602)868-5801	AZ-PIGICO
AZ	AZ PIMA COUNTY AIR QUALITY CONTROL DISTRICT 150 W. CONGRESS ST. TUCSON, AZ 85701 (602)792-8686	AZ-PIMACO
CA	SAN DIEGO CO. AIR POLLUTION CONTROL DISTRICT 9150 CHESAPEAKE DRIVE SAN DIEGO, CA 92123 (619)565-3947	CA-S.DIEGO
CA	STANISLAUS COUNTY AIR POLLUTION CONTROL DISTRICT 1716 MORGAN RD MODESTO, CA 95351 (209)571-6908	CA-STANISL
CA	CA AIR RESOURCES BOARD BOX 2815 SACRAMENTO, CA 95812 (916)322-2990	CA
CA	SACRAMENTO CO. AIR POLLUTION CONTROL DISTRICT 9323 TECH CENTER, SUITE 800 SACRAMENTO, CA 95826 (916)366-2107	CA-SAC.
CA	BAY AREA AIR QUALITY MANAGEMENT DISTRICT 939 ELLIS STREET SAN FRANCISCO, CA 94109 (415)771-6000	CA-BAAQMD
CA	BUTTE CO AIR POLLUTION CONTROL DISTRICT 316 NELSON AVE., P.O. BOX 1229 OROVILLE, CA 95965 (916)538-7383	CA-BUTTE
CA	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 9150 FLAIR DRIVE EL MONTE, CA 91731 (818)572-6200	CA-SCAQMD
CA	MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT 1164 MONROE ST., #10 SALINAS, CA 93906 (408)443-1135	CA-MONT.
CA	SANTA BARBARA CO. AIR POLLUTION CONTROL DISTRICT 5540 EDWILL SUITE B SANTA BARBARA, CA 93111 (805)964-8111	CA-S.BARB.
CA	KERN COUNTY APCD 1601 "H" STREET, SUITE 250 BAKERSFIELD, CA 933015199 (805)861-3682	CA-KERN CO
CA	FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 FULTON MALL FRESNO, CA 93721 (209)445-3239	CA-FRESNO
CA	SISKIYOU COUNTY A.P.C.D. 525 SOUTH FOOTHILL DR. YREKA, CA 96097 (916)842-3906	CA-SISK
CA	AMADOR COUNTY AIR POLLUTION CONTROL DISTRICT 108 COURT STREET JACKSON, CA 956422379 (209)223-6406	CA-AMADOR

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM
CA	MODOC CO. AIR POLLUTION CONTROL DIST. 202 WEST 4TH STREET ALTURAS, CA 96134 (916)233-3939	CA-MODOC
CA	PLACER COUNTY AIR POLLUTION CONTROL DISTRICT 11484 B AVE AUBURN, CA 95603 (916)823-4443	CA-PLACER
CO	CO DEPT. OF HEALTH 4210 E. 11TH AVENUE DENVER, CO 80220 (303)331-8500	CO
CO	ENVIRONMENTAL HEALTH DEPARTMENT, CITY OF ASPEN 130 SOUTH GALENA ASPEN, CO 81611 (303)925-2020	CO-ASPEN
CO	EL PASO COUNTY HEALTH DEPARTMENT 501 N. FOOTE COLORADO SPRINGS, CO 80909 (303)578-3137	CO-ELPASO
CT	CT DEPT. OF ENV. PROTECTION, AIR COMPLIANCE UNIT 165 CAPITOL AVE., RM. 146 HARTFORD, CT 06106 (203)566-2690	CT
CT	MILFORD HEALTH DEPARTMENT 2051 BRIDGEPORT AVENUE MILFORD, CT 06460 (203)783-3287	CT-MILFORD
DC	DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS 5010 OVERLOOK AVENUE, SW WASHINGTON, DC 200325396 (202)767-7370	DC-DCRA
DE	DE DIV. OF ENV. CONTROL, AIR RESOURCES SECTION 89 KINGS HWY., BOX 1401 DOVER, DE 19903 (302)736-4791	DE
FL	HILLSBOROUGH CO. ENVIRONMENTAL PROTECTION COMMISSION 1900 9TH AVE. TAMPA, FL 32206 (813)272-5960	FL-TAMPA
FL	BIO-ENVIRONMENTAL SERVICES DIV., CITY OF JACKSONVILLE 515 W. 6TH STREET JACKSONVILLE, FL 32206 (904)630-3210	FL-JACKSON
FL	FL DEPT. OF ENV. REG., BUR. OF AIR QUALITY MGMT. 2600 BLAIR STONE ROAD TALLAHASSEE, FL 323992400 (904)488-1344	FL
FL	BROWARD COUNTY ENVIRONMENTAL QUALITY CONTROL BOARD 621 S. ANDREWS AVE. FT. LAUDERDALE, FL 33315 (305)765-4436	FL-FTLDLE
FL	PALM BEACH COUNTY HEALTH DEPARTMENT 901 EVERNIA STREET WEST PALM BEACH, FL 33402 (305)820-3070	FL-PALMBE
FL	ORANGE COUNTY AIR POLLUTION CONTROL BOARD 2002 EAST MICHIGAN ST. ORLANDO, FL 32806 (305)244-7400	FL-ORANGE
FL	PINELLAS COUNTY AIR POLLUTION CONTROL BOARD 16100 FAIRCHILD DR. CLEARWATER, FL 34622 (813)530-6522	FL-PINELLA
GA	GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH 270 WASHINGTON ST. SW ATLANTA, GA 30334 (404)656-4867	GA
HI	HI DEPT. OF HEALTH, ENV. PERMITS BRANCH 645 HALEKAUWILA STREET,3RD FL. HONOLULU, HI 96813 (808)548-6410	HI
IA	IOWA DEPT. OF NATURAL RESOURCES 900 E. GRAND AV.,WALLACE BLDG. DES MOINES, IA 50309 (515)281-8690	IA
IA	LINN COUNTY HEALTH DEPARTMENT AIR POLLUTION DIVISION 751 CENTER PT. RD. NE. CEDAR RAPIDS, IA 52402 (319)398-3551	IA-LINNCO

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM
ID	ID DIV. OF ENV., AIR QUALITY BUR. 450 W. STATE STREET BOISE, ID 83720 (208)334-5898	ID
IL	DEPT. OF INSPECTIONS & PERMITS, CITY OF EVANSTON 2100 RIDGE AVENUE EVANSTON, IL 60204 (312)866-2952	IL-EVAN.
IL	BEDFORD PARK ENVIRONMENTAL QUALITY CONTROL BOARD P.O. BOX 128 ARGO, IL 605010128 (312)458-2975	IL-BEDPK
IL	IL ENV. PROT. AGENCY, DIV. OF AIR POLLUTION CONTROL 2200 CHURCHILL RD.,BOX 19276 SPRINGFIELD, IL 62794 (217)782-2113	IL
IN	INDIANA DEPT. OF ENV. MANAGEMENT 105 SOUTH MERIDIAN ST. INDIANAPOLIS, IN 46225 (317)232-8325	IN
IN	HAMMOND AIR POLLUTION CONTROL 5925 CALUMET AVENUE HAMMOND, IN 46320 (219)853-6306	IN-HAMMOND
IN	INDIANAPOLIS AIR POLLUTION CONTROL DIVISION 2700 SOUTH BELMONT AVE. INDIANAPOLIS, IN 46221 (317)633-5496	IN-INMAP
IN	VIGO COUNTY AIR POLLUTION CONTROL 201 CHERRY STREET TERRE HAUTE, IN 47807 (812)238-8433	IN-VIGO
KS	KANSAS CITY-WYANDOTTE CO. DEPT. OF HLTH;AIR POLLUTION CNTRL 619 ANN AVE. KANSAS CITY, KS 66101 (913)321-4803	KS-KC
KS	KS. DEPT. OF HEALTH AND ENV., BUR. OF AIR QUAL. & RAD. CNTRL BLDG. 740, FORBES FIELD TOPEKA, KS 66620 (913)296-1570	KS
KS	TOPEKA-SHAWNEE COUNTY HEALTH DEPARTMENT P.O. BOX 118, 1615 WEST 8TH TOPEKA, KS 66601 (913)233-8961	KS-T/S
KS	WICHITA-SEDGWICK COUNTY DEPT. OF COMMUNITY HEALTH 1900 E. 9TH STREET WICHITA, KS 67214 (316)268-8351	KS-WICHITA
KY	KY NAT. RES. & ENV. PROT. CABINET, DIV. FOR AIR QUALITY 18 REILLY RD. FRANKFORT, KY 40601 (502)564-3382	KY
KY	JEFFERSON COUNTY AIR POLLUTION CONTROL AGENCY 914 EAST BROADWAY LOUISVILLE, KY 40204 (502)584-8151	KY-JEFF
LA	LA DEPT. OF ENVIRONMENTAL QUALITY, AIR QUALITY DIV. BOX 44096 BATON ROUGE, LA 70804 (504)342-1201	LA
MA	MA DEPT OF ENV. QUALITY ENG.,DIV. OF AIR QUALITY CONTROL ONE WINTER ST., 8TH FL. BOSTON, MA 02108 (617)292-5630	MA
MD	MD DEPT. OF HEALTH & MENTAL HYGIENE, AIR MANAGEMENT ADMIN. 201 W. PRESTON STREET BALTIMORE, MD 21201 (301)383-2779	MD
MD	BALTIMORE COUNTY DEPARTMENT OF HEALTH 300 EAST TOWSONTOWN BLVD. TOWSON, MD 21204 (301)494-3775	MD-BALT
ME	ME DEPT. OF ENV. PROT., BUR. OF AIR QUALITY CONTROL STATEHOUSE STATION 17 AUGUSTA, ME 04333 (207)289-2437	ME
MI	MI DEPT. OF NATURAL RESOURCES, AIR QUALITY DIV. BOX 30028 LANSING, MI 48909 (517)373-7023	MI

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM
MI	AIR POLLUTION CONTROL DIV., WAYNE CO. HEALTH DEPT. 2211 E. JEFFERSON ST. DETROIT, MI 48207 (313)567-4100	MI-DETROIT
MI	MACOMB COUNTY HEALTH DEPARTMENT 43525 ELIZABETH MOUNT CLEMENS, MI 48043 (313)469-5236	MI-MACOMB
MN	MN POLLUTION CONTROL AGENCY, DIV. OF AIR QUALITY 520 LAFAYETTE RD. N. ST. PAUL, MN 55155 (612)296-7373	MN
MO	ST. LOUIS COUNTY AIR POLLUTION CONTROL 801 SOUTH BRENTWOOD BLVD. CLAYTON, MO 63105 (314)854-6921	MO-STLUCO
MO	MO DEPT. OF NATURAL RESOURCES, AIR POLLUTION CONTROL PROGRAM BOX 176 JEFFERSON CITY, MO 65102 (314)751-4817	MO
MO	SPRINGFIELD-GREENE COUNTY AIR POLLUTION CONTROL AUTHORITY 227 EAST CHESTNUT EXPRESSWAY SPRINGFIELD, MO 65802 (417)864-1662	MO-SPGRCO
MS	MS DEPT. OF NATURAL RESOURCES, BUREAU OF POLLUTION CONTROL 2380 HIGHWAY 80 WEST JACKSON, MS 39209 (601)961-5171	MS
MT	MT DEPT. OF HEALTH AND ENV. SCIENCES, AIR QUALITY BUREAU COGSWELL BLDG. HELENA, MT 59620 (406)444-3454	MT
MT	MISSOULA CO. HEALTH DEPT. 301 W. ALDER MISSOULA, MT 59802 (406)721-5700	MT-MISSOU
NC	FORSYTH COUNTY ENVIRONMENTAL AFFAIRS DEPARTMENT 537 N. SPRUCE STREET WINSTON-SALEM, NC 27101 (919)727-8060	NC-FORCO
NC	NC DIV. OF ENV. MGMT., AIR QUALITY SECTION BOX 27687 RALEIGH, NC 27611 (919)733-3340	NC
NC	W.N.C. REGIONAL AIR POLLUTION CONTROL AGENCY P.O. BOX 7215 ASHEVILLE, NC 28807 (704)255-5655	NC-WNC
ND	ND DEPT. OF HEALTH, DIVISION OF ENVIRONMENTAL ENGINEERING 1200 MISSOURI AVE,BX 5520,R304 BISMARCK, ND 585025520 (701)224-2348	ND
NE	NE DEPT. OF ENV. CONTROL, AIR POLLUTION DIV. BOX 94877 LINCOLN, NE 68509 (402)471-2186	NE
NH	NH DEPT. OF ENV. SERVICES, AIR RESOURCES DIV. 64 N. MAIN STREET BOX 2033 CONCORD, NH 03302 (603)271-1370	NH
NJ	NJ DEPT. OF ENV. PROT., BUR. OF AIR POLLUTION CONTROL CN 027, 401 E. STATE ST. TRENTON, NJ 08625 (609)292-6704	NJ
NJ	HUDSON REGIONAL HEALTH COMMISSION 313 HARRISON AVE. HARRISON, NJ 07029 (201)485-7002	NJ-HUDSON
NM	NM ENV. IMPROVEMENT DIV., AIR QUALITY BUR. BOX 968 SANTA FE, NM 87504 (505)827-0070	NM
NV	NV DIVISION OF ENVIRONMENTAL PROTECTION,AIR QUALITY CONTROL 201 S. FALL STREET CARSON CITY, NV 89710 (702)885-5065	NV
NV	AIR POLLUTION CONTROL DIV., DIST. HEALTH DEPT. OF CLARK CO. 625 SHADOW LANE LAS VEGAS, NV 89106 (702)383-1276	NV-L.VEGAS

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM
NY	NY DEPT OF ENV. CONSERVATION, DIV. OF AIR QUALITY 50 WOLF ROAD ALBANY, NY 12233 (518)457-7688	NY
NY	NASSAU CO. DEPT. OF HEALTH, BUR. OF AIR POLLUTION CONTROL 240 OLD COUNTRY ROAD MINEOLA, NY 11501 (516)535-3671	NY-NASSAU
OH	CLEVELAND DIV. OF AIR POL. CONTROL, DEPT. OF PUBLIC HEALTH 2735 BROADWAY AVE. CLEVELAND, OH 44115 (216)664-3591	OH-CLEVE.
OH	MONTGOMERY CO. REGIONAL AIR POLLUTION CONTROL AGENCY BOX 972, 451 W. THIRD ST. DAYTON, OH 45422 (513)225-4435	OH-DAYTON
OH	LAKE COUNTY GENERAL HEALTH DISTRICT P.O. BOX 490, 105 MAIN STREET PAINESVILLE, OH 44077 (216)357-2543	OH-LAKECO
OH	OHIO EPA, DIV. OF AIR POLLUTION CONTROL P.O. BOX 1049, 1800 WATERMARK COLUMBUS, OH 43266 (614)481-4310	OH
OH	TOLEDO ENVIRONMENTAL SERVICES AGENCY 26 MAIN STREET TOLEDO, OH 43605 (419)693-0350	OH-TOLEDO
OH	NORTH OHIO VALLEY AIR AUTHORITY 814 ADAMS STREET STEUBENVILLE, OH 43952 (614)282-3303	OH-NOVAA
OH	SOUTHWEST OHIO AIR POLLUTION CONTROL AGENCY 2400 BEEKMAN STREET CINCINNATI, OH 45214 (513)251-8777	OH-SW
OK	OK DEPT. OF HEALTH, AIR QUALITY SERVICE BOX 53551, 1000 NE 10TH ST. OKLAHOMA CITY, OK 73152 (405)271-5220	OK
OK	TULSA CITY-COUNTY HEALTH DEPT., AIR QUALITY CONTROL 4616 EAST 15TH TULSA, OK 74112 (918)744-1000	OK-TULSA
OR	LANE REGIONAL AIR POLLUTION AUTHORITY 225 NORTH 5TH, SUITE 501 SPRINGFIELD, OR 97477 (503)726-2514	OR-LANE
OR	OR DEPT. OF ENV. QUALITY, AIR QUALITY CONTROL DIV. 811 SW 6TH AVE PORTLAND, OR 97204 (503)229-6411	OR
PA	PA DEPT. OF ENV. RESOURCES, BUR. OF AIR QUALITY CONTROL 200 N. THIRD STREET HARRISBURG, PA 17120 (717)787-9702	PA
PA	PHIL. DEPT. OF PUBLIC HEALTH, AIR MANAGEMENT SERVICES 500 S. BROAD ST., 2ND FL. PHILADELPHIA, PA 19146 (215)686-7842	PA-PHIL.
PA	ALLEGHENY CO. BUREAU OF AIR POLLUTION CONTROL 301 39TH STREET PITTSBURGH, PA 15201 (412)578-8111	PA-PITT.
PR	PUERTO RICO ENVIRONMENTAL QUALITY BOARD 204 DEL PARQUE ST. SANTURCE, PR 00910 (809)725-5140	PR
RI	RI DEPT OF ENV. MGMT., DIV. OF AIR & HAZ. MATERIALS 75 DAVIS ST., 204 CANNON BLDG. PROVIDENCE, RI 02908 (401)277-2808	RI
SC	SC DEPT. OF HEALTH & ENV. CONTROL, BUR. OF AIR QUAL. CONTROL 2600 BULL STREET COLUMBIA, SC 29201 (803)758-5406	SC
SD	SD DEPT. OF WATER & NAT. RES., OFFICE OF AIR QUALITY FOSS BUILDING, RM 217 PIERRE, SD 57501 (605)773-3153	SD

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM
TN	CHATTANOOGA-HAMILTON CO. AIR POLLUTION CONTROL BUREAU 3511 ROSSVILLE BLVD. CHATTANOOGA, TN 37407 (615)867-4321	TN-CHAT.
TN	TN DEPT. OF HEALTH AND ENVIRONMENT, DIV. OF APC 701 BROADWAY, 4TH FLOOR CUSTOM NASHVILLE, TN 372195403 (615)741-3651	TN
TN	MEMPHIS-SHELBY CO. DEPT. OF HEALTH 814 JEFFERSON AVE. MEMPHIS, TN 38105 (901)576-7775	TN-MEMPHIS
TN	KNOX COUNTY DEPARTMENT OF AIR POLLUTION CONTROL 400 MAIN AVENUE, CITY-CO. BLDG KNOXVILLE, TN 37902 (615)521-2488	TN-KNOX
TN	METRO HEALTH DEPT. POLLUTION CONTROL DIVISION 311 23RD AVENUE,NORTH NASHVILLE, TN 37203 (615)327-9313	TN-NASH
TX	TX AIR CONTROL BOARD 6330 HIGHWAY 290 EAST AUSTIN, TX 78723 (512)451-5711	TX
UT	UT DEPT. OF HEALTH, BUR. OF AIR QUALITY BOX 2500 SALT LAKE CITY, UT 84110 (801)533-6108	UT
VA	VA AIR POLLUTION CONTROL BOARD 9TH ST. OFFICE BLDG., RM. 801 RICHMOND, VA 23219 (804)786-4867	VA
VI	DEPT. OF CONSERV. & CULTURAL AFFAIRS, U.S. VIRGIN ISLANDS P.O. BOX 4340 CHARLOTT AMALIE,, VI 00801 (809)725-5140	VI
VT	VT DEPT. ENVIRONMENTAL CONSERVATION, AIR POLLUTION CNT. DIV. 103 SO. MAIN ST. BLDG. 3 SOUTH WATERBURY, VT 05676 (802)244-8731	VT
WA	OLYMPIA AIR POLLUTION CONTROL AUTHORITY 120 E. STATE AVE OLUMPIA, WA 98501 (206)352-4881	WA-OLYMPIA
WA	WA DEPT. OF ECOLOGY, OFFICE OF HAZ. SUB. & AIR QUALITY CNTL. ROW SIX, P.B. -11 OLYMPIA, WA 98504 (206)459-6711	WA
WA	PUGET SOUND AIR POLLUTION CONTROL AGENCY 200 W MERCER ST #205 SEATTLE, WA 981193958 (206)344-7335	WA-PUGET
WA	GRANT COUNTY CLEAN AIR AUTHORITY P.O. BOX 37 EPHRATA, WA 98823 (509)754-2011	WA-GRANT
WA	SOUTH WEST AIR POLLUTION CONTROL AUTHORITY 1308 N.E. 134TH STR. SUITE D VANCOUVER, WA 98685 (206)574-3058	WA-SWEST
WI	WI DEPT. OF NAT. RES., BUR. OF AIR MANAGEMENT BOX 7921 MADISON, WI 53707 (608)266-7718	WI
WV	WV AIR POLLUTION CONTROL COMMISSION 1558 WASHINGTON ST., EAST CHARLESTON, WV 25311 (304)348-3286	WV
WY	WY DEPT. OF ENV. QUALITY, AIR QUALTIY DIV. 122 WEST 25TH STREET CHEYENNE, WY 82002 (307)777-7391	WY

APPENDIX D. CLEARINGHOUSE IDENTIFIERS FOR CHEMICAL GROUPS

CL-CAS	POLLUTANT NAME
CL-ABRAS	ABRASIVES
CL-ACID	ACIDIC COMPOUNDS
CL-ADIP	ADIPATES
CL-ALDEHYD	ALDEHYDES
CL-AMINE	AMINES
CL-BROM	BROMINE COMPOUNDS
CL-BTX	BENZENE, TOLUENE, XYLENE
CL-CARBON	TOTAL CARBON
CL-CARCIN	CARCINOGENS
CL-CFC	CHLOROFLUOROCARBONS
CL-CHC	CHLORINATED HYDROCARBONS
CL-CHLOR	CHLORINE COMPOUNDS
CL-CHROME	CHROMIUM COMPOUNDS
CL-COE	COKE OVEN EMISSIONS
CL-CREOSOL	CREOSOLS
CL-CUTFLU	CUTTING FLUIDS
CL-DGAEA	DIETHYLENE GLYCOL ALKYL ETHERS/ACETATES
CL-DIESEL	DIESEL FUEL EMISSIONS
CL-DIISOCY	DIISOCYANATES
CL-DIOXIN	DIOXINS
CL-ETS	ENVIRONMENTAL TOBACCO SMOKE
CL-EXPLO	EXPLOSIVES
CL-FUELOIL	WASTE DERIVED FUEL OIL EMISSIONS
CL-FURAN	FURANS
CL-HALOME	HALOMETHANES
CL-HAZWAST	HAZARDOUS WASTES
CL-HCARB	HYDROCARBONS
CL-IAP	INDOOR AIR POLLUTANTS
CL-INORGAN	INORGANIC COMPOUNDS
CL-METAL	METALLIC COMPOUNDS
CL-MINDUST	MINERAL DUSTS
CL-MINFIB	MINERAL FIBERS
CL-MS	MINERAL SPIRITS
CL-NITRATE	NITRATES
CL-NITRITE	NITRITES
CL-NITROSO	NITROSO COMPOUNDS
CL-NMHC	NON-METHANE HYDROCARBONS
CL-ODOR	ODORS
CL-OH	HYDROXIDE
CL-ORGANIC	ORGANIC COMPOUNDS
CL-PAH	POLYCYCLIC AROMATIC COMPOUNDS
CL-PCO	PHOTO CHEMICAL OXIDANTS
CL-PEST	PESTICIDES
CL-PHENOL	PHENOLS
CL-PHOSPHA	PHOSPHATES
CL-PHTH	PHTHALATES
CL-PLAS	PLASTICIZERS
CL-PM	PARTICULATE MATTER
CL-POM	POLYCYCLIC ORGANIC MATTER
CL-RAD	RADIATION
CL-RESIN	RESINS
CL-SALTS	SALTS
CL-SEWSLUD	SEWAGE SLUDGE

CL-CAS	POLLUTANT NAME
CL-SOLVENT	SOLVENTS
CL-SULFATE	SULFATES
CL-SULFIDE	SULFIDES
CL-SULFITE	SULFITES
CL-SVOC	SEMIVOLATILE ORGANIC COMPOUNDS
CL-TIN	ORGANIC TIN COMPOUNDS
CL-TRS	TOTAL REDUCED SULFUR
CL-VARIOUS	VARIOUS POLLUTANTS
CL-VEG	VEGETABLE OIL MIST
CL-VOC	VOLATILE ORGANIC COMPOUNDS
CL-WELD	WELDING FUMES
CL-WOOD	WOOD SMOKE

APPENDIX E, SIC CODES AND INDUSTRY DESCRIPTIONS

SIC CODE	DESCRIPTION
00	SIC CODE NOT AVAILABLE
000	SIC CODE UNAVAILABLE
0000	SIC CODE UNAVAILABLE
01	AGRICULTURAL PRODUCTION-CROPS
011	CASH CROPS
0111	WHEAT
0112	RICE
0115	CORN
0116	SOYBEANS
0119	CASH GRAINS, NEC
013	FIELD CROPS, EXCEPT CASH GRAINS
0131	COTTON
0132	TOBACCO
0133	SUGAR CROPS
0134	IRISH POTATOES
0139	FIELD CROPS, EXCEPT CASH GRAINS, NEC
016	VEGETABLES AND MELONS
0161	VEGETABLES AND MELONS
017	FRUITS AND TREE NUTS
0171	BERRY CROPS
0172	GRAPES
0173	TREE NUTS
0174	CITRUS FRUITS
0175	DECIDUOUS TREE FRUITS
0179	FRUITS AND TREE NUTS, NEC
018	HORTICULTURAL SPECIALTIES
0180	SIC - 0180 HORTICULTURAL SPECIALTIES
0181	ORNAMENTAL NURSERY PRODUCTS
0182	FOOD CROPS GROWN UNDER COVER
0189	HORTICULTURAL SPECIALTIES, NEC
019	GENERAL FARMS, PRIMARILY CROP
0191	GENERAL FARMS, PRIMARILY CROP
02	AGRICULTURAL PRODUCTION-LIVESTOCK
021	LIVESTOCK, EXC. DAIRY, POULTRY, ETC.
0211	BEEF CATTLE FEEDLOTS
0212	BEEF CATTLE, EXCEPT FEEDLOTS
0213	HOGS
0214	SHEEP AND GOATS
0219	GENERAL LIVESTOCK, NEC
024	DAIRY FARMS
0241	DAIRY FARMS
025	POULTRY AND EGGS
0251	BROILER, FRYER AND ROASTER CHICKENS
0252	CHICKEN EGGS
0253	TURKEYS AND TURKEY EGGS
0254	POULTRY HATCHERIES
0259	POULTRY AND EGGS
027	ANIMAL SPECIALTIES
0271	FUR-BEARING ANIMALS AND RABBITS
0272	HORSES AND OTHER EQUINES
0279	ANIMAL SPECIALTIES, NEC
0282	SIC - 0282
0289	SIC - 0289
029	GENERAL FARMS, PRIMARILY LIVESTOCK
0291	GENERAL FARMS, PRIMARILY LIVESTOCK
0299	SIC - 0299
0373	SIC - 0373
07	AGRICULTURAL SERVICES
071	SOIL PREPARATION SERVICES
0711	SOIL PREPARATION SERVICES
072	CROP SERVICES
0721	CROP PLANTING AND PROTECTION
0722	CROP HARVESTING
0723	CROP PREPARATION SERVICES FOR MARKET
0724	COTTON GINNING
0729	GENERAL CROP SERVICES
074	VETERINARY SERVICES
0741	VETERINARY SERVICES, FARM LIVESTOCK
0742	VETERINARY SERVICES, SPECIALTIES
075	ANIMAL SERVICES, EXCEPT VETERINARY
0751	LIVESTOCK SERVICES, EXC. SPECIALTIES
0752	ANIMAL SPECIALTY SERVICES
0754	ANIMAL SERVICES
076	FARM LABOR AND MANAGEMENT SERVICES
0761	FARM LABOR CONTRACTORS
0762	FARM MANAGEMENT SERVICES
078	LANDSCAPE AND HORTICULTURAL SERVICES
0781	LANDSCAPE COUNSELING AND PLANNING
0782	LAWN AND GARDEN SERVICES
0783	ORNAMENTAL SHRUB AND TREE SERVICES
08	FORESTRY
081	TIMBER TRACTS
0811	TIMBER TRACTS
082	FOREST NURSERIES AND SEED GATHERING
0821	FOREST NURSERIES AND SEED GATHERING
084	GATHERING OF MISC. FOREST PRODUCTS
0843	EXTRACTION OF PINE GUM
0849	GATHERING OF FOREST PRODUCTS, NEC
085	FORESTRY SERVICES
0851	FORESTRY SERVICES
09	FISHING, HUNTING, AND TRAPPING
091	COMMERCIAL FISHING
0912	FINFISH
0913	SHELLFISH
0919	MISCELLANEOUS MARINE PRODUCTS
092	FISH HATCHERIES AND PRESERVES
0921	FISH HATCHERIES AND PRESERVES
097	HUNTING, TRAPPING, GAME PROPAGATION
0971	HUNTING, TRAPPING, GAME PROPAGATION
10	METAL MINING
101	IRON ORES
1011	IRON ORES
102	COPPER ORES
1021	COPPER ORES
103	LEAD AND ZINC ORES
1031	LEAD AND ZINC ORES
104	GOLD AND SILVER ORES
1041	GOLD ORES
1044	SILVER ORES
105	BAUXITE AND OTHER ALUMINUM ORES
1051	BAUXITE AND OTHER ALUMINUM ORES
106	FERROALLOY ORES, EXCEPT VANADIUM
1061	FERROALLOY ORES, EXCEPT VANADIUM
108	METAL MINING SERVICES
1081	METAL MINING SERVICES
109	MISCELLANEOUS METAL ORES
1092	MERCURY ORES
1094	URANIUM-RADIUM-VANADIUM ORES
1099	METAL ORES, NEC
11	ANTHRACITE MINING
111	ANTHRACITE MINING
1111	ANTHRACITE
1112	ANTHRACITE MINING SERVICES
12	BITUMINOUS COAL AND LIGNITE MINING
121	BITUMINOUS COAL AND LIGNITE MINING
1211	BITUMINOUS COAL AND LIGNITE
1213	BITUMINOUS & LIGNITE MINING SERVICES
1216	SIC - 1216
13	OIL AND GAS EXTRACTION
131	CRUDE PETROLEUM AND NATURAL GAS
1311	CRUDE PETROLEUM AND NATURAL GAS
132	NATURAL GAS LIQUIDS
1321	NATURAL GAS LIQUIDS
138	OIL AND GAS FIELD SERVICES
1380	SIC - 1380 OIL AND GAS FIELD SERVICES
1381	DRILLING OIL AND GAS WELLS
1382	OIL AND GAS EXPLORATION SERVICES
1389	OIL AND GAS FIELD SERVICES, NEC
14	NONMETALLIC MINERALS, EXCEPT FUELS
141	DIMENSION STONE
1411	DIMENSION STONE
142	CRUSHED AND BROKEN STONE
1420	SIC - 1420 CRUSHED AND BROKEN STONE
1422	CRUSHED AND BROKEN LIMESTONE
1423	CRUSHED AND BROKEN GRANITE
1429	CRUSHED AND BROKEN STONE, NEC
144	SAND AND GRAVEL
1442	CONSTRUCTION SAND AND GRAVEL
1446	INDUSTRIAL SAND
145	CLAY, CERAMIC & REFRACTORY MINERALS
1452	BENTONITE
1453	FIRE CLAY
1454	FULLER'S EARTH
1455	KAOLIN AND BALL CLAY
1459	CLAY AND RELATED MINERALS, NEC
147	CHEMICAL AND FERTILIZER MINERALS

SIC CODE	DESCRIPTION
1472	BARITE
1473	FLUORSPAR
1474	POTASH, SODA, AND BORATE MINERALS
1475	PHOSPHATE ROCK
1476	ROCK SALT
1477	SULFUR
1479	CHEMICAL AND FERTILIZER MINING, NEC
148	NONMETALLIC MINERALS SERVICES
1481	NONMETALLIC MINERALS SERVICES
149	MISCELLANEOUS NONMETALLIC MINERALS
1492	GYPSUM
1496	TALC, SOAPSTONE, AND PYROPHYLLITE
1499	NONMETALLIC MINERALS, NEC
15	GENERAL BUILDING CONTRACTORS
1501	BUILDING CONSTRUCTION
152	RESIDENTIAL BUILDING CONSTRUCTION
1521	SINGLE-FAMILY HOUSING CONSTRUCTION
1522	RESIDENTIAL CONSTRUCTION, NEC
153	OPERATIVE BUILDERS
1531	OPERATIVE BUILDERS
154	NONRESIDENTIAL BUILDING CONSTRUCTION
1541	INDUSTRIAL BUILDINGS AND WAREHOUSES
1542	NONRESIDENTIAL CONSTRUCTION, NEC
16	HEAVY CONSTRUCTION CONTRACTORS
161	HIGHWAY AND STREET CONSTRUCTION
1611	HIGHWAY AND STREET CONSTRUCTION
1616	HIGHWAY AND STREET CONSTRUCTION
162	HEAVY CONSTRUCTION, EXCEPT HIGHWAY
1622	BRIDGE, TUNNEL, & ELEVATED HIGHWAY
1623	WATER, SEWER, AND UTILITY LINES
1629	HEAVY CONSTRUCTION, NEC
17	SPECIAL TRADE CONTRACTORS
171	PLUMBING, HEATING, AIR CONDITIONING
1711	PLUMBING, HEATING, AIR CONDITIONING
172	PAINTING, PAPER HANGING, DECORATING
1721	PAINTING, PAPER HANGING, DECORATING
173	ELECTRICAL WORK
1731	ELECTRICAL WORK
174	MASONRY, STONEWORK, AND PLASTERING
1741	MASONRY AND OTHER STONEWORK
1742	PLASTERING, DRY WALL AND INSULATION
1743	TERRAZZO, TILE, MARBLE, MOSAIC WORK
175	CARPENTERING AND FLOORING
1751	CARPENTERING
1752	FLOOR LAYING AND FLOOR WORK, NEC
176	ROOFING AND SHEET METAL WORK
1761	ROOFING AND SHEET METAL WORK
177	CONCRETE WORK
1771	CONCRETE WORK
178	WATER WELL DRILLING
1781	WATER WELL DRILLING
179	MISC. SPECIAL TRADE CONTRACTORS

SIC CODE	DESCRIPTION
1791	STRUCTURAL STEEL ERECTION
1793	GLASS AND GLAZING WORK
1794	EXCAVATING AND FOUNDATION WORK
1795	WRECKING AND DEMOLITION WORK
1796	INSTALLING BUILDING EQUIPMENT, NEC
1799	SPECIAL TRADE CONTRACTORS, NEC
1950	SIC - 1950
1951	SIC - 1951
20	FOOD AND KINDRED PRODUCTS
2000	FOOD AND KINDRED PRODUCTS
201	MEAT PRODUCTS
2010	MEAT PRODUCTS
2011	MEAT PACKING PLANTS
2013	SAUSAGES AND OTHER PREPARED MEATS
2016	POULTRY DRESSING PLANTS
2017	POULTRY AND EGG PROCESSING
202	DAIRY PRODUCTS
2021	CREAMERY BUTTER
2022	CHEESE, NATURAL AND PROCESSED
2023	CONDENSED AND EVAPORATED MILK
2024	ICE CREAM AND FROZEN DESSERTS
2026	FLUID MILK
203	PRESERVED FRUITS AND VEGETABLES
2032	CANNED SPECIALTIES
2033	CANNED FRUITS AND VEGETABLES
2034	DEHYDRATED FRUITS, VEGETABLES, SOUPS
2035	PICKLES, SAUCES, AND SALAD DRESSINGS
2036	CANNED FRUITS AND VEGETABLES
2037	FROZEN FRUITS AND VEGETABLES
2038	FROZEN SPECIALTIES
204	GRAIN MILL PRODUCTS
2041	FLOUR AND OTHER GRAIN MILL PRODUCTS
2043	CEREAL BREAKFAST FOODS
2044	RICE MILLING
2045	BLENDED AND PREPARED FLOUR
2046	WET CORN MILLING
2047	DOG, CAT, AND OTHER PET FOOD
2048	PREPARED FEEDS, NEC
205	BAKERY PRODUCTS
2051	BREAD, CAKE, AND RELATED PRODUCTS
2052	COOKIES AND CRACKERS
2054	BAKERY PRODUCTS
206	SUGAR AND CONFECTIONERY PRODUCTS
2061	RAW CANE SUGAR
2062	CANE SUGAR REFINING
2063	BEET SUGAR
2065	CONFECTIONERY PRODUCTS
2066	CHOCOLATE AND COCOA PRODUCTS
2067	CHEWING GUM
207	FATS AND OILS
2074	COTTONSEED OIL MILLS
2075	SOYBEAN OIL MILLS

SIC CODE	DESCRIPTION
2076	VEGETABLE OIL MILLS, NEC
2077	ANIMAL AND MARINE FATS AND OILS
2079	SHORTENING AND COOKING OILS
208	BEVERAGES
2080	BEVERAGES
2082	MALT BEVERAGES
2083	MALT
2084	WINES, BRANDY, AND BRANDY SPIRITS
2085	DISTILLED LIQUOR, EXCEPT BRANDY
2086	BOTTLED AND CANNED SOFT DRINKS
2087	FLAVORING EXTRACTS AND SYRUPS, NEC
209	MISC. FOODS AND KINDRED PRODUCTS
2091	CANNED AND CURED SEAFOODS
2092	FRESH OR FROZEN PACKAGED FISH
2095	ROASTED COFFEE
2097	MANUFACTURED ICE
2098	MACARONI AND SPAGHETTI
2099	FOOD PREPARATIONS, NEC
21	TOBACCO MANUFACTURES
211	CIGARETTES
2111	CIGARETTES
212	CIGARS
2121	CIGARS
213	CHEWING AND SMOKING TOBACCO
2131	CHEWING AND SMOKING TOBACCO
214	TOBACCO STEMMING AND REDRYING
2141	TOBACCO STEMMING AND REDRYING
2190	TOBACCO MANUFACTURES
22	TEXTILE MILL PRODUCTS
221	WEAVING MILLS, COTTON
2211	WEAVING MILLS, COTTON
2216	FABRIC MILLS
222	WEAVING MILLS, SYNTHETICS
2221	WEAVING MILLS, SYNTHETICS
223	WEAVING AND FINISHING MILLS, WOOL
2231	WEAVING AND FINISHING MILLS, WOOL
224	NARROW FABRIC MILLS
2241	NARROW FABRIC MILLS
225	KNITTING MILLS
2251	WOMEN'S HOSIERY, EXCEPT SOCKS
2252	HOSIERY, NEC
2253	KNIT OUTERWEAR MILLS
2254	KNIT UNDERWEAR MILLS
2257	CIRCULAR KNIT FABRIC MILLS
2258	WARP KNIT FABRIC MILLS
2259	KNITTING MILLS, NEC
226	TEXTILE FINISHING, EXCEPT WOOL
2261	FINISHING PLANTS, COTTON
2262	FINISHING PLANTS, SYNTHETICS
2269	FINISHING PLANTS, NEC
227	FLOOR COVERING MILLS
2271	WOVEN CARPETS AND RUGS

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
2272	TUFTED CARPETS AND RUGS
2279	CARPETS AND RUGS, NEC
228	YARN AND THREAD MILLS
2281	YARN MILLS, EXCEPT WOOL
2282	THROWING AND WINDING MILLS
2283	WOOL YARN MILLS
2284	THREAD MILLS
229	MISCELLANEOUS TEXTILE GOODS
2291	FELT GOODS, EXC. WOVEN FELTS & HATS
2292	LACE GOODS
2293	PADDINGS AND UPHOLSTERY FILLING
2294	PROCESSED TEXTILE WASTE
2295	COATED FABRICS, NOT RUBBERIZED
2296	TIRE CORD AND FABRIC
2297	NONWOVEN FABRICS
2298	CORDAGE AND TWINE
2299	TEXTILE GOODS, NEC
23	APPAREL AND OTHER TEXTILE PRODUCTS
231	MEN'S AND BOYS' SUITS AND COATS
2311	MEN'S AND BOYS' SUITS AND COATS
232	MEN'S AND BOYS' FURNISHINGS
2321	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR
2322	MEN'S AND BOYS' UNDERWEAR
2323	MEN'S AND BOYS' NECKWEAR
2327	MEN'S AND BOYS' SEPARATE TROUSERS
2328	MEN'S AND BOYS' WORK CLOTHING
2329	MEN'S AND BOYS' CLOTHING, NEC
233	WOMEN'S AND MISSES' OUTERWEAR
2331	WOMEN'S & MISSES' BLOUSES & WAISTS
2335	WOMEN'S AND MISSES' DRESSES
2337	WOMEN'S AND MISSES' SUITS AND COATS
2339	WOMEN'S AND MISSES' OUTERWEAR, NEC
234	WOMEN'S AND CHILDREN'S UNDERGARMENTS
2341	WOMEN'S AND CHILDREN'S UNDERWEAR
2342	BRASSIERES AND ALLIED GARMENTS
235	HATS, CAPS, AND MILLINERY
2351	MILLINERY
2352	HATS AND CAPS, EXCEPT MILLINERY
236	CHILDREN'S OUTERWEAR
2361	CHILDREN'S DRESSES AND BLOUSES
2363	CHILDREN'S COATS AND SUITS
2369	CHILDREN'S OUTERWEAR, NEC
237	FUR GOODS
2371	FUR GOODS
238	MISCELLANEOUS APPAREL AND ACCESSORIES
2381	FABRIC DRESS AND WORK GLOVES
2384	ROBES AND DRESSING GOWNS
2385	WATERPROOF OUTERGARMENTS
2386	LEATHER AND SHEEP LINED CLOTHING
2387	APPAREL BELTS
2389	APPAREL AND ACCESSORIES, NEC
239	MISC. FABRICATED TEXTILE PRODUCTS

SIC CODE	DESCRIPTION
2391	CURTAINS AND DRAPERIES
2392	HOUSE FURNISHINGS, NEC
2393	TEXTILE BAGS
2394	CANVAS AND RELATED PRODUCTS
2395	PLEATING AND STITCHING
2396	AUTOMOTIVE AND APPAREL TRIMMINGS
2397	SCHIFFLI MACHINE EMBROIDERIES
2399	FABRICATED TEXTILE PRODUCTS, NEC
24	LUMBER AND WOOD PRODUCTS
2408	LUMBER AND WOOD PRODUCTS
241	LOGGING CAMPS & LOGGING CONTRACTORS
2411	LOGGING CAMPS & LOGGING CONTRACTORS
242	SAWMILLS AND PLANING MILLS
2421	SAWMILLS AND PLANING MILLS, GENERAL
2426	HARDWOOD DIMENSION AND FLOORING
2429	SPECIAL PRODUCT SAWMILLS, NEC
243	MILLWORK, PLYWOOD & STRUCTURAL MEMBERS
2431	MILLWORK
2432	MILLWORK
2434	WOOD KITCHEN CABINETS
2435	HARDWOOD VENEER AND PLYWOOD
2436	SOFTWOOD VENEER AND PLYWOOD
2439	STRUCTURAL WOOD MEMBERS, NEC
244	WOOD CONTAINERS
2441	NAILED WOOD BOXES AND SHOOK
2448	WOOD PALLETS AND SKIDS
2449	WOOD CONTAINERS, NEC
245	WOOD BUILDINGS AND MOBILE HOMES
2451	MOBILE HOMES
2452	PREFABRICATED WOOD BUILDINGS
2479	SIC - 2479
249	MISCELLANEOUS WOOD PRODUCTS
2490	MISCELLANEOUS WOOD PRODUCTS
2491	WOOD PRESERVING
2492	PARTICLEBOARD
2499	WOOD PRODUCTS, NEC
25	FURNITURE AND FIXTURES
251	HOUSEHOLD FURNITURE
2511	WOOD HOUSEHOLD FURNITURE
2512	UPHOLSTERED HOUSEHOLD FURNITURE
2514	METAL HOUSEHOLD FURNITURE
2515	MATTRESSES AND BEDSPRINGS
2517	WOOD TV AND RADIO CABINETS
2519	HOUSEHOLD FURNITURE, NEC
252	OFFICE FURNITURE
2521	WOOD OFFICE FURNITURE
2522	METAL OFFICE FURNITURE
253	PUBLIC BUILDING & RELATED FURNITURE
2531	PUBLIC BUILDING & RELATED FURNITURE
2535	PUBLIC BUILDING AND RELATED FURNITURE
2539	PUBLIC BUILDING AND RELATED FURNITURE
254	PARTITIONS AND FIXTURES

SIC CODE	DESCRIPTION
2541	WOOD PARTITIONS AND FIXTURES
2542	METAL PARTITIONS AND FIXTURES
2571	SIC - 2571
259	MISCELLANEOUS FURNITURE AND FIXTURES
2591	DRAPERY HARDWARE & BLINDS & SHADES
2599	FURNITURE AND FIXTURES, NEC
26	PAPER AND ALLIED PRODUCTS
261	PULP MILLS
2611	PULP MILLS
262	PAPER MILLS, EXCEPT BUILDING PAPER
2621	PAPER MILLS, EXCEPT BUILDING PAPER
263	PAPERBOARD MILLS
2631	PAPERBOARD MILLS
264	MISC. CONVERTED PAPER PRODUCTS
2641	PAPER COATING AND GLAZING
2642	ENVELOPES
2643	BAGS, EXCEPT TEXTILE BAGS
2644	CONVERTED PAPER AND PAPER BOARD PRODUCTS
2645	DIE-CUT PAPER AND BOARD
2646	PRESSED AND MOLDED PULP GOODS
2647	SANITARY PAPER PRODUCTS
2648	STATIONERY PRODUCTS
2649	CONVERTED PAPER PRODUCTS, NEC
265	PAPERBOARD CONTAINERS AND BOXES
2651	FOLDING PAPERBOARD BOXES
2652	SET-UP PAPERBOARD BOXES
2653	CORRUGATED AND SOLID FIBER BOXES
2654	SANITARY FOOD CONTAINERS
2655	FIBER CANS, DRUMS & SIMILAR PRODUCTS
266	BUILDING PAPER AND BOARD MILLS
2661	BUILDING PAPER AND BOARD MILLS
27	PRINTING AND PUBLISHING
2700	PRINTING AND PUBLISHING
271	NEWSPAPERS
2711	NEWSPAPERS
272	PERIODICALS
2721	PERIODICALS
273	BOOKS
2731	BOOK PUBLISHING
2732	BOOK PRINTING
274	MISCELLANEOUS PUBLISHING
2741	MISCELLANEOUS PUBLISHING
275	COMMERCIAL PRINTING
2750	COMMERCIAL PRINTING
2751	COMMERCIAL PRINTING, LETTERPRESS
2752	COMMERCIAL PRINTING, LITHOGRAPHIC
2753	ENGRAVING AND PLATE PRINTING
2754	COMMERCIAL PRINTING, GRAVURE
276	MANIFOLD BUSINESS FORMS
2761	MANIFOLD BUSINESS FORMS
277	GREETING CARD PUBLISHING
2771	GREETING CARD PUBLISHING

APPENDIX E, (Continued)

SIC CODE	DESCRIPTION
278	BLANKBOOKS AND BOOKBINDING
2782	BLANKBOOKS AND LOOSELEAF BINDERS
2789	BOOKBINDING AND RELATED WORK
279	PRINTING TRADE SERVICES
2791	TYPESETTING
2792	SERVICE INDUSTRIES FOR THE PRINTING TRADE
2793	PHOTOENGRAVING
2794	ELECTROTYPING AND STEREOTYPING
2795	LITHOGRAPHIC PLATEMAKING SERVICES
2799	SERVICE INDUSTRIES FOR THE PRINTING TRADE
28	CHEMICALS AND ALLIED PRODUCTS
2800	SIC - 2800 CHEMICALS AND ALLIED PRODUCTS
281	INDUSTRIAL INORGANIC CHEMICALS
2810	INDUSTRIAL INORGANIC CHEMICALS
2812	ALKALIES AND CHLORINE
2813	INDUSTRIAL GASES
2815	INDUSTRIAL INORGANIC CHEMICALS
2816	INORGANIC PIGMENTS
2818	INDUSTRIAL INORGANIC CHEMICALS NEC
2819	INDUSTRIAL INORGANIC CHEMICALS, NEC
282	PLASTICS MATERIALS AND SYNTHETICS
2821	PLASTICS MATERIALS AND RESINS
2822	SYNTHETIC RUBBER
2823	CELLULOSIC MAN-MADE FIBERS
2824	ORGANIC FIBERS, NONCELLULOSIC
2827	PLASTIC BLOW BOTTLE MANUFACTURING
283	DRUGS
2831	BIOLOGICAL PRODUCTS
2833	MEDICINALS AND BOTANICALS
2834	PHARMACEUTICAL PREPARATIONS
284	SOAP, CLEANERS, AND TOILET GOODS
2840	SOAP, CLEANERS, AND TOILET GOODS
2841	SOAP AND OTHER DETERGENTS
2842	POLISHES AND SANITATION GOODS
2843	SURFACE ACTIVE AGENTS
2844	TOILET PREPARATIONS
285	PAINTS AND ALLIED PRODUCTS
2851	PAINTS AND ALLIED PRODUCTS
286	INDUSTRIAL ORGANIC CHEMICALS
2860	INDUSTRIAL ORGANIC CHEMICALS
2861	GUM AND WOOD CHEMICALS
2865	CYCLIC CRUDES AND INTERMEDIATES
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC
287	AGRICULTURAL CHEMICALS
2870	AGRICULTURAL CHEMICALS
2872	AGRICULTURAL CHEMICALS
2873	NITROGENOUS FERTILIZERS
2874	PHOSPHATIC FERTILIZERS
2875	FERTILIZERS, MIXING ONLY
2879	AGRICULTURAL CHEMICALS, NEC
289	MISCELLANEOUS CHEMICAL PRODUCTS
2891	ADHESIVES AND SEALANTS
2892	EXPLOSIVES
2893	PRINTING INK
2895	CARBON BLACK
2899	CHEMICAL PREPARATIONS, NEC
29	PETROLEUM AND COAL PRODUCTS
291	PETROLEUM REFINING
2911	PETROLEUM REFINING
2918	PETROLEUM REFINING
295	PAVING AND ROOFING MATERIALS
2951	PAVING MIXTURES AND BLOCKS
2952	ASPHALT FELTS AND COATINGS
299	MISC. PETROLEUM AND COAL PRODUCTS
2991	MISCELLANEOUS PRODUCTS OF PETROLEUM AND COAL
2992	LUBRICATING OILS AND GREASES
2999	PETROLEUM AND COAL PRODUCTS, NEC
30	RUBBER AND MISC. PLASTICS PRODUCTS
301	TIRES AND INNER TUBES
3011	TIRES AND INNER TUBES
302	RUBBER AND PLASTICS FOOTWEAR
3021	RUBBER AND PLASTICS FOOTWEAR
3029	RUBBER AND PLASTIC FOOTWEAR
303	RECLAIMED RUBBER
3031	RECLAIMED RUBBER
304	RUBBER AND PLASTICS HOSE AND BELTING
3041	RUBBER AND PLASTICS HOSE AND BELTING
306	FABRICATED RUBBER PRODUCTS, NEC
3060	FABRICATED RUBBER PRODUCTS, NEC
3069	FABRICATED RUBBER PRODUCTS, NEC
307	MISCELLANEOUS PLASTICS PRODUCTS
3070	MISCELLANEOUS PLASTICS PRODUCTS
3079	MISCELLANEOUS PLASTICS PRODUCTS
31	LEATHER AND LEATHER PRODUCTS
311	LEATHER TANNING AND FINISHING
3111	LEATHER TANNING AND FINISHING
312	LEATHER PRODUCTS
3126	LEATHER PRODUCTS
313	FOOTWEAR CUT STOCK
3131	FOOTWEAR CUT STOCK
314	FOOTWEAR, EXCEPT RUBBER
3141	FOOTWEAR, EXCEPT RUBBER
3142	HOUSE SLIPPERS
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC
3149	FOOTWEAR, EXCEPT RUBBER, NEC
315	LEATHER GLOVES AND MITTENS
3151	LEATHER GLOVES AND MITTENS
316	LUGGAGE
3161	LUGGAGE
317	HANDBAGS AND PERSONAL LEATHER GOODS
3171	WOMEN'S HANDBAGS AND PURSES
3172	PERSONAL LEATHER GOODS, NEC
319	LEATHER GOODS, NEC
3199	LEATHER GOODS, NEC
32	STONE, CLAY, AND GLASS PRODUCTS
320	STONE, CLAY, GLASS AND CONCRETE PRODUCTS
3200	STONE, CLAY, AND GLASS PRODUCTS
3208	STONE, CLAY, GLASS AND CONCRETE PRODUCTS
321	FLAT GLASS
3211	FLAT GLASS
3216	FLAT GLASS
322	GLASS AND GLASSWARE, PRESSED OR BLOWN
3220	SIC - 3220 GLASS AND GLASSWARE, PRESSED OR BLOWN
3221	GLASS CONTAINERS
3229	PRESSED AND BLOWN GLASS, NEC
323	PRODUCTS OF PURCHASED GLASS
3231	PRODUCTS OF PURCHASED GLASS
324	CEMENT, HYDRAULIC
3241	CEMENT, HYDRAULIC
325	STRUCTURAL CLAY PRODUCTS
3251	BRICK AND STRUCTURAL CLAY TILE
3253	CERAMIC WALL AND FLOOR TILE
3255	CLAY REFRACTORIES
3259	STRUCTURAL CLAY PRODUCTS, NEC
326	POTTERY AND RELATED PRODUCTS
3261	VITREOUS PLUMBING FIXTURES
3262	VITREOUS CHINA FOOD UTENSILS
3263	FINE EARTHENWARE FOOD UTENSILS
326A	PORCELAIN ELECTRICAL SUPPLIES
3269	POTTERY PRODUCTS, NEC
327	CONCRETE, GYPSUM, AND PLASTER PRODUCTS
3271	CONCRETE BLOCK AND BRICK
3272	CONCRETE PRODUCTS, NEC
3273	READY-MIXED CONCRETE
3274	LIME
3275	GYPSUM PRODUCTS
328	CUT STONE AND STONE PRODUCTS
3281	CUT STONE AND STONE PRODUCTS
329	MISC. NONMETALLIC MINERAL PRODUCTS
3291	ABRASIVE PRODUCTS
3292	ASBESTOS PRODUCTS
3293	GASKETS, PACKING AND SEALING DEVICES
3295	MINERALS, GROUND OR TREATED
3296	MINERAL WOOL
3297	NONCLAY REFRACTORIES
3299	NONMETALLIC MINERAL PRODUCTS, NEC
33	PRIMARY METAL INDUSTRIES
331	BLAST FURNACE AND BASIC STEEL PRODUCTS
3312	BLAST FURNACES AND STEEL MILLS
3313	ELECTROMETALLURGICAL PRODUCTS
3315	STEEL WIRE AND RELATED PRODUCTS
3316	COLD FINISHING OF STEEL SHAPES
3317	STEEL PIPE AND TUBES
332	IRON AND STEEL FOUNDRIES
3321	GRAY IRON FOUNDRIES

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
3322	MALLEABLE IRON FOUNDRIES
3323	IRON AND STEEL FOUNDRY
3324	STEEL INVESTMENT FOUNDRIES
3325	STEEL FOUNDRIES, NEC
333	PRIMARY NONFERROUS METALS
3331	PRIMARY COPPER
3332	PRIMARY LEAD
3333	PRIMARY ZINC
3334	PRIMARY ALUMINUM
3339	PRIMARY NONFERROUS METALS, NEC
334	SECONDARY NONFERROUS METALS
3341	SECONDARY NONFERROUS METALS
3342	SECONDARY SMELTING AND REFINING OF NON-FERROUS METALS
335	NONFERROUS ROLLING AND DRAWING
3350	ROLLING, DRAWING, AND EXTRUDING OF NON-FERROUS METALS
3351	COPPER ROLLING AND DRAWING
3352	ROLLING, DRAWING, AND EXTRUDING OF NON-FERROUS METALS
3353	ALUMINUM SHEET, PLATE, AND FOIL
3354	ALUMINUM EXTRUDED PRODUCTS
3355	ALUMINUM ROLLING AND DRAWING, NEC
3356	NONFERROUS ROLLING AND DRAWING, NEC
3357	NONFERROUS WIRE DRAWING & INSULATING
336	NONFERROUS FOUNDRIES
3360	NONFERROUS FOUNDRIES
3361	ALUMINUM FOUNDRIES
3362	BRASS, BRONZE, AND COPPER FOUNDRIES
3369	NONFERROUS FOUNDRIES, NEC
339	MISCELLANEOUS PRIMARY METAL PRODUCTS
3391	MISCELLANEOUS PRIMARY METAL PRODUCTS
3392	MISCELLANEOUS PRIMATY METAL PRODUCTS
3398	METAL HEAT TREATING
3399	PRIMARY METAL PRODUCTS, NEC
34	FABRICATED METAL PRODUCTS
3400	FABRICATED METAL PRODUCTS
341	METAL CANS AND SHIPPING CONTAINERS
3411	METAL CANS
3412	METAL BARRELS, DRUMS, AND PAILS
342	CUTLERY, HAND TOOLS, AND HARDWARE
3421	CUTLERY
3423	HAND AND EDGE TOOLS, NEC
3425	HAND SAWS AND SAW BLADES
3429	HARDWARE, NEC
343	PLUMBING AND HEATING, EXCEPT ELECTRIC
3431	METAL SANITARY WARE
3432	PLUMBING FITTINGS AND BRASS GOODS
3433	HEATING EQUIPMENT, EXCEPT ELECTRIC
344	FABRICATED STRUCTURAL METAL PRODUCTS
3440	FABRICATED STRUCTURAL METAL PRODUCTS
3441	FABRICATED STRUCTURAL METAL
3442	METAL DOORS, SASH, AND TRIM
3443	FABRICATED PLATE WORK (BOILER SHOPS)
3444	SHEET METAL WORK
3446	ARCHITECTURAL METAL WORK
3447	FABRICATED METAL PRODUCTS
3448	PREFABRICATED METAL BUILDINGS
3449	MISCELLANEOUS METAL WORK
345	SCREW MACHINE PRODUCTS, BOLTS, ETC.
3451	SCREW MACHINE PRODUCTS
3452	BOLTS, NUTS, RIVETS, AND WASHERS
346	METAL FORGINGS AND STAMPINGS
3461	METAL FORGING AND STAMPING
3462	IRON AND STEEL FORGINGS
3463	NONFERROUS FORGINGS
3465	AUTOMOTIVE STAMPINGS
3466	CROWNS AND CLOSURES
3469	METAL STAMPINGS, NEC
347	METAL SERVICES, NEC
3470	METAL SERVICES, NEC
3471	PLATING AND POLISHING
3477	CODING, ENGRAVING AND ALLIED SERVICES
3479	METAL COATING AND ALLIED SERVICES
348	ORDNANCE AND ACCESSORIES, NEC
3481	ORDINANCE AND ACCESSORIES
3482	SMALL ARMS AMMUNITION
3483	AMMUNITION, EXC. FOR SMALL ARMS, NEC
3484	SMALL ARMS
3489	ORDNANCE AND ACCESSORIES, NEC
349	MISC. FABRICATED METAL PRODUCTS
3490	MISC. FABRICATED METAL PRODUCTS
3491	MISCELLANEOUS FABRICATED METAL PRODUCTS
3492	MISCELLANEOUS FABRICATED METAL PRODUCTS
3493	STEEL SPRINGS, EXCEPT WIRE
3494	VALVES AND PIPE FITTINGS
3495	WIRE SPRINGS
3496	MISC. FABRICATED WIRE PRODUCTS
3497	METAL FOIL AND LEAF
3498	FABRICATED PIPE AND FITTINGS
3499	FABRICATED METAL PRODUCTS, NEC
35	MACHINERY, EXCEPT ELECTRICAL
3500	MACHINERY, EXCEPT ELECTRICAL
351	ENGINES AND TURBINES
3511	TURBINES AND TURBINE GENERATOR SETS
3519	INTERNAL COMBUSTION ENGINES, NEC
352	FARM AND GARDEN MACHINERY
3522	FARM AND GARDEN MACHINERY
3523	FARM MACHINERY AND EQUIPMENT
3524	LAWN AND GARDEN EQUIPMENT
353	CONSTRUCTION AND RELATED MACHINERY
3531	CONSTRUCTION MACHINERY
3532	MINING MACHINERY
3533	OIL FIELD MACHINERY
3534	ELEVATORS AND MOVING STAIRWAYS
3535	CONVEYORS AND CONVEYING EQUIPMENT
3536	HOISTS, CRANES, AND MONORAILS
3537	INDUSTRIAL TRUCKS AND TRACTORS
354	METALWORKING MACHINERY
3540	METALWORKING MACHINERY
3541	MACHINE TOOLS, METAL CUTTING TYPES
3542	MACHINE TOOLS, METAL FORMING TYPES
3544	SPECIAL DIES, TOOLS, JIGS & FIXTURES
3545	MACHINE TOOL ACCESSORIES
3546	POWER DRIVEN HAND TOOLS
3547	ROLLING MILL MACHINERY
3548	METALWORKING MACHINERY, NEC
3549	METALWORKING MACHINERY, NEC
355	SPECIAL INDUSTRY MACHINERY
3551	FOOD PRODUCTS MACHINERY
3552	TEXTILE MACHINERY
3553	WOODWORKING MACHINERY
3554	PAPER INDUSTRIES MACHINERY
3555	PRINTING TRADES MACHINERY
3559	SPECIAL INDUSTRY MACHINERY, NEC
356	GENERAL INDUSTRIAL MACHINERY
3561	PUMPS AND PUMPING EQUIPMENT
3562	BALL AND ROLLER BEARINGS
3563	AIR AND GAS COMPRESSORS
3564	BLOWERS AND FANS
3565	INDUSTRIAL PATTERNS
3566	SPEED CHANGERS, DRIVES, AND GEARS
3567	INDUSTRIAL FURNACES AND OVENS
3568	POWER TRANSMISSION EQUIPMENT, NEC
3569	GENERAL INDUSTRIAL MACHINERY, NEC
357	OFFICE AND COMPUTING MACHINES
3572	TYPEWRITERS
3573	ELECTRONIC COMPUTING EQUIPMENT
3574	CALCULATING AND ACCOUNTING MACHINES
3576	SCALES AND BALANCES, EXC. LABORATORY
3579	OFFICE MACHINES, NEC
358	REFRIGERATION AND SERVICE MACHINERY
3581	AUTOMATIC MERCHANDISING MACHINES
3582	COMMERCIAL LAUNDRY EQUIPMENT
3585	REFRIGERATION AND HEATING EQUIPMENT
3586	MEASURING AND DISPENSING PUMPS
3589	SERVICE INDUSTRY MACHINERY, NEC
359	MISC. MACHINERY, EXCEPT ELECTRICAL
3591	MACHINERY, EXECPT ELECTRICAL, NEC
3592	CARBURETORS, PISTONS, RINGS, VALVES
3599	MACHINERY, EXCEPT ELECTRICAL, NEC
36	ELECTRIC AND ELECTRONIC EQUIPMENT
361	ELECTRIC DISTRIBUTING EQUIPMENT
3610	ELECTRIC DISTRIBUTING EQUIPMENT
3611	ELECTRIC TRANSMISSION EQUIPMENT
3612	TRANSFORMERS
3613	SWITCHGEAR AND SWITCHBOARD APPARATUS
3618	ELECTRIC TRANSMISSION EQUIPMENT
3619	ELECTRIC TRANSMISSION EQUIPMENT

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
362	ELECTRICAL INDUSTRIAL APPARATUS
3620	ELECTRICAL INDUSTRIAL APPARATUS
3621	MOTORS AND GENERATORS
3622	INDUSTRIAL CONTROLS
3623	WELDING APPARATUS, ELECTRIC
3624	CARBON AND GRAPHITE PRODUCTS
3629	ELECTRICAL INDUSTRIAL APPARATUS, NEC
363	HOUSEHOLD APPLIANCES
3630	HOUSEHOLD APPLIANCES
3631	HOUSEHOLD COOKING EQUIPMENT
3632	HOUSEHOLD REFRIGERATORS AND FREEZERS
3633	HOUSEHOLD LAUNDRY EQUIPMENT
3634	ELECTRIC HOUSEWARES AND FANS
3635	HOUSEHOLD VACUUM CLEANERS
3636	SEWING MACHINES
3639	HOUSEHOLD APPLIANCES, NEC
364	ELECTRIC LIGHTING AND WIRING EQUIPMENT
3641	ELECTRIC LAMPS
3642	ELECTRIC LIGHTING AND WIRING EQUIPMENT
3643	CURRENT-CARRYING WIRING DEVICES
3644	NONCURRENT-CARRYING WIRING DEVICES
3645	RESIDENTIAL LIGHTING FIXTURES
3646	COMMERCIAL LIGHTING FIXTURES
3647	VEHICULAR LIGHTING EQUIPMENT
3648	LIGHTING EQUIPMENT, NEC
365	RADIO AND TV RECEIVING EQUIPMENT
3651	RADIO AND TV RECEIVING SETS
3652	PHONOGRAPH RECORDS
366	COMMUNICATION EQUIPMENT
3661	TELEPHONE AND TELEGRAPH APPARATUS
3662	RADIO AND TV COMMUNICATION EQUIPMENT
367	ELECTRONIC COMPONENTS AND ACCESSORIES
3670	ELECTRONIC COMPONENTS AND ACCESSORIES
3671	ELECTRON TUBES, RECEIVING TYPE
3672	CATHODE RAY TELEVISION PICTURE TUBES
3673	ELECTRON TUBES, TRANSMITTING
3674	SEMICONDUCTORS AND RELATED DEVICES
3675	ELECTRONIC CAPACITORS
3676	ELECTRONIC RESISTORS
3677	ELECTRONIC COILS AND TRANSFORMERS
3678	ELECTRONIC CONNECTORS
3679	ELECTRONIC COMPONENTS, NEC
369	MISC. ELECTRICAL EQUIPMENT & SUPPLIES
3691	STORAGE BATTERIES
3692	PRIMARY BATTERIES, DRY AND WET
3693	X-RAY APPARATUS AND TUBES
3694	ENGINE ELECTRICAL EQUIPMENT
3699	ELECTRICAL EQUIPMENT & SUPPLIES, NEC
37	TRANSPORTATION EQUIPMENT
371	MOTOR VEHICLES AND EQUIPMENT
3710	MOTOR VEHICLES AND EQUIPMENT
3711	MOTOR VEHICLES AND CAR BODIES
3713	TRUCK AND BUS BODIES
3714	MOTOR VEHICLE PARTS AND ACCESSORIES
3715	TRUCK TRAILERS
3716	MOTOR HOMES
3717	MOTOR VEHICLES
372	AIRCRAFT AND PARTS
3721	AIRCRAFT
3722	AIRCRAFT AND PARTS
3724	AIRCRAFT ENGINES AND ENGINE PARTS
3728	AIRCRAFT EQUIPMENT, NEC
3729	AIRCRAFT AND PARTS
373	SHIP AND BOAT BUILDING AND REPAIRING
3731	SHIP BUILDING AND REPAIRING
3732	BOAT BUILDING AND REPAIRING
374	RAILROAD EQUIPMENT
3742	RAILROAD EQUIPMENT
3743	RAILROAD EQUIPMENT
375	MOTORCYCLES, BICYCLES, AND PARTS
3751	MOTORCYCLES, BICYCLES, AND PARTS
376	GUIDED MISSILES, SPACE VEHICLES, PARTS
3761	GUIDED MISSILES AND SPACE VEHICLES
3764	SPACE PROPULSION UNITS AND PARTS
3769	SPACE VEHICLE EQUIPMENT, NEC
379	MISCELLANEOUS TRANSPORTATION EQUIPMENT
3792	TRAVEL TRAILERS AND CAMPERS
3795	TANKS AND TANK COMPONENTS
3799	TRANSPORTATION EQUIPMENT, NEC
38	INSTRUMENTS AND RELATED PRODUCTS
3800	INSTRUMENTS AND RELATED PRODUCTS
381	ENGINEERING & SCIENTIFIC INSTRUMENTS
3810	ENGINEERING & SCIENTIFIC INSTRUMENTS
3811	ENGINEERING & SCIENTIFIC INSTRUMENTS
3811*	ENGINEERING AND SCIENTIFIC INSTRUMENTS
382	MEASURING AND CONTROLLING DEVICES
3821	ENGINEERING AND SCIENTIFIC INSTRUMENTS
3822	ENVIRONMENTAL CONTROLS
3823	PROCESS CONTROL INSTRUMENTS
3824	FLUID METERS AND COUNTING DEVICES
3825	INSTRUMENTS TO MEASURE ELECTRICITY
3829	MEASURING & CONTROLLING DEVICES, NEC
383	OPTICAL INSTRUMENTS AND LENSES
3831	OPTICAL INSTRUMENTS AND LENSES
3832	OPTICAL INSTRUMENTS AND LENSES
384	MEDICAL INSTRUMENTS AND SUPPLIES
3840	MEDICAL INSTRUMENTS AND SUPPLIES
3841	SURGICAL AND MEDICAL INSTRUMENTS
3842	SURGICAL APPLIANCES AND SUPPLIES
3843	DENTAL EQUIPMENT AND SUPPLIES
385	OPHTHALMIC GOODS
3851	OPHTHALMIC GOODS
386	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
387	WATCHES, CLOCKS, AND WATCHCASES
3871	WATCHES, CLOCKS AND WATCHCASES
3873	WATCHES, CLOCKS, AND WATCHCASES
39	MISCELLANEOUS MANUFACTURING INDUSTRIES
3900	MISCELLANEOUS MANUFACTURING INDUSTRIES
391	JEWELRY, SILVERWARE, AND PLATED WARE
3911	JEWELRY, PRECIOUS METAL
3914	SILVERWARE AND PLATED WARE
3915	JEWELERS' MATERIALS & LAPIDARY WORK
393	MUSICAL INSTRUMENTS
3931	MUSICAL INSTRUMENTS
394	TOYS AND SPORTING GOODS
3941	SIC - 3941
3942	DOLLS
3943	SIC - 3943
3944	GAMES, TOYS, AND CHILDREN'S VEHICLES
3949	SPORTING AND ATHLETIC GOODS, NEC
395	PENS, PENCILS, OFFICE AND ART SUPPLIES
3951	PENS AND MECHANICAL PENCILS
3952	LEAD PENCILS AND ART GOODS
3953	MARKING DEVICES
3955	CARBON PAPER AND INKED RIBBONS
396	COSTUME JEWELRY AND NOTIONS
3961	COSTUME JEWELRY
3962	ARTIFICIAL FLOWERS
3963	BUTTONS
3964	NEEDLES, PINS, AND FASTENERS
399	MISCELLANEOUS MANUFACTURES
3991	BROOMS AND BRUSHES
3993	SIGNS AND ADVERTISING DISPLAYS
3995	BURIAL CASKETS
3996	HARD SURFACE FLOOR COVERINGS
3999	MANUFACTURING INDUSTRIES, NEC
40	RAILROAD TRANSPORTATION
401	RAILROADS
4011	RAILROADS, LINE-HAUL OPERATING
4013	SWITCHING AND TERMINAL SERVICES
41	LOCAL AND INTERURBAN PASSENGER TRANSIT
411	LOCAL AND SUBURBAN TRANSPORTATION
4111	LOCAL AND SUBURBAN TRANSIT
4119	LOCAL PASSENGER TRANSPORTATION, NEC
412	TAXICABS
4121	TAXICABS
413	INTERCITY HIGHWAY TRANSPORTATION
4131	INTERCITY HIGHWAY TRANSPORTATION
414	TRANSPORTATION CHARTER SERVICE
4141	LOCAL PASSENGER CHARTER SERVICE
4142	CHARTER SERVICE, EXCEPT LOCAL
415	SCHOOL BUSES
4151	SCHOOL BUSES
417	BUS TERMINAL AND SERVICE FACILITIES
4171	BUS TERMINAL FACILITIES

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
4172	BUS SERVICE FACILITIES
42	TRUCKING AND WAREHOUSING
421	TRUCKING, LOCAL AND LONG DISTANCE
4212	LOCAL TRUCKING, WITHOUT STORAGE
4213	TRUCKING, EXCEPT LOCAL
4214	LOCAL TRUCKING AND STORAGE
422	PUBLIC WAREHOUSING
4221	FARM PRODUCT WAREHOUSING AND STORAGE
4222	REFRIGERATED WAREHOUSING
4224	HOUSEHOLD GOODS WAREHOUSING
4225	GENERAL WAREHOUSING AND STORAGE
4226	SPECIAL WAREHOUSING AND STORAGE, NEC
423	TRUCKING TERMINAL FACILITIES
4231	TRUCKING TERMINAL FACILITIES
43	U.S. POSTAL SERVICE
431	U.S. POSTAL SERVICE
4311	U.S. POSTAL SERVICE
44	WATER TRANSPORTATION
441	DEEP SEA FOREIGN TRANSPORTATION
4411	DEEP SEA FOREIGN TRANSPORTATION
442	DEEP SEA DOMESTIC TRANSPORTATION
4421	NONCONTIGUOUS AREA TRANSPORTATION
4422	COASTWISE TRANSPORTATION
4423	INTERCOASTAL TRANSPORTATION
443	GREAT LAKES TRANSPORTATION
4431	GREAT LAKES TRANSPORTATION
444	TRANSPORTATION ON RIVERS AND CANALS
4441	TRANSPORTATION ON RIVERS AND CANALS
445	LOCAL WATER TRANSPORTATION
4432	FERRIES
4433	LIGHTERAGE
4434	TOWING AND TUGBOAT SERVICE
4439	LOCAL WATER TRANSPORTATION, NEC
446	WATER TRANSPORTATION SERVICES
4463	MARINE CARGO HANDLING
4464	CANAL OPERATION
4469	WATER TRANSPORTATION SERVICES, NEC
45	TRANSPORTATION BY AIR
451	CERTIFICATED AIR TRANSPORTATION
4511	CERTIFICATED AIR TRANSPORTATION
452	NONCERTIFICATED AIR TRANSPORTATION
4521	NONCERTIFICATED AIR TRANSPORTATION
458	AIR TRANSPORTATION SERVICES
4582	AIRPORTS AND FLYING FIELDS
4583	AIRPORT TERMINAL SERVICES
46	PIPE LINES, EXCEPT NATURAL GAS
4600	PIPE LINES, EXCEPT NATURAL GAS
461	PIPE LINES, EXCEPT NATURAL GAS
4612	CRUDE PETROLEUM PIPE LINES
4613	REFINED PETROLEUM PIPE LINES
4619	PIPE LINES, NEC
47	TRANSPORTATION SERVICES

SIC CODE	DESCRIPTION
471	FREIGHT FORWARDING
4712	FREIGHT FORWARDING
472	ARRANGEMENT OF TRANSPORTATION
4722	PASSENGER TRANSPORTATION ARRANGEMENT
4723	FREIGHT TRANSPORTATION ARRANGEMENT
474	RENTAL OF RAILROAD CARS
4742	RAILROAD CAR RENTAL WITH SERVICE
4743	RAILROAD CAR RENTAL WITHOUT SERVICE
478	MISCELLANEOUS TRANSPORTATION SERVICES
4782	INSPECTION AND WEIGHING SERVICES
4783	PACKING AND CRATING
4784	FIXED FACILITIES FOR VEHICLES, NEC
4789	TRANSPORTATION SERVICES, NEC
48	COMMUNICATION
481	TELEPHONE COMMUNICATION
4811	TELEPHONE COMMUNICATION
482	TELEGRAPH COMMUNICATION
4821	TELEGRAPH COMMUNICATION
483	RADIO AND TELEVISION BROADCASTING
4832	RADIO BROADCASTING
4833	TELEVISION BROADCASTING
489	COMMUNICATION SERVICES, NEC
4899	COMMUNICATION SERVICES, NEC
49	ELECTRIC, GAS, AND SANITARY SERVICES
491	ELECTRIC SERVICES
4911	ELECTRIC SERVICES
492	GAS PRODUCTION AND DISTRIBUTION
4922	NATURAL GAS TRANSMISSION
4923	GAS TRANSMISSION AND DISTRIBUTION
4924	NATURAL GAS DISTRIBUTION
4925	GAS PRODUCTION AND/OR DISTRIBUTION
493	COMBINATION UTILITY SERVICES
4931	ELECTRIC AND OTHER SERVICES COMBINED
4932	GAS AND OTHER SERVICES COMBINED
4939	COMBINATION UTILITY SERVICES, NEC
494	WATER SUPPLY
4941	WATER SUPPLY
495	SANITARY SERVICES
4952	SEWERAGE SYSTEMS
4953	REFUSE SYSTEMS
4959	SANITARY SERVICES, NEC
496	STEAM SUPPLY
4961	STEAM SUPPLY
497	IRRIGATION SYSTEMS
4971	IRRIGATION SYSTEMS
50	WHOLESALE TRADE-DURABLE GOODS
501	MOTOR VEHICLES & AUTOMOTIVE EQUIPMENT
5012	AUTOMOBILES AND OTHER MOTOR VEHICLES
5013	AUTOMOTIVE PARTS AND SUPPLIES
5014	TIRES AND TUBES
502	FURNITURE AND HOME FURNISHINGS
5021	FURNITURE

SIC CODE	DESCRIPTION
5023	HOME FURNISHINGS
503	LUMBER AND CONSTRUCTION MATERIALS
5031	LUMBER, PLYWOOD AND MILLWORK
5039	CONSTRUCTION MATERIALS, NEC
504	SPORTING GOODS, TOYS AND HOBBY GOODS
5041	SPORTING AND RECREATIONAL GOODS
5042	TOYS AND HOBBY GOODS AND SUPPLIES
5043	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
505	METALS AND MINERALS, EXCEPT PETROLEUM
5051	METALS SERVICE CENTERS AND OFFICES
5052	COAL AND OTHER MINERALS AND ORES
506	ELECTRICAL GOODS
5063	ELECTRICAL APPARATUS AND EQUIPMENT
5064	ELECTRICAL APPLIANCES, TV AND RADIOS
5065	ELECTRONIC PARTS AND EQUIPMENT
507	HARDWARE, PLUMBING & HEATING EQUIPMENT
5072	HARDWARE
5074	PLUMBING & HYDRONIC HEATING SUPPLIES
5075	WARM AIR HEATING & AIR CONDITIONING
5078	REFRIGERATION EQUIPMENT AND SUPPLIES
508	MACHINERY, EQUIPMENT, AND SUPPLIES
5081	COMMERCIAL MACHINES AND EQUIPMENT
5082	CONSTRUCTION AND MINING MACHINERY
5083	FARM MACHINERY AND EQUIPMENT
5084	INDUSTRIAL MACHINERY AND EQUIPMENT
5085	INDUSTRIAL SUPPLIES
5086	PROFESSIONAL EQUIPMENT AND SUPPLIES
5087	SERVICE ESTABLISHMENT EQUIPMENT
5088	TRANSPORTATION EQUIPMENT & SUPPLIES
509	MISCELLANEOUS DURABLE GOODS
5091	SIC - 5091
5092	SIC - 5092
5093	SCRAP AND WASTE MATERIALS
5094	JEWELRY, WATCHES, & PRECIOUS STONES
5096	SIC - 5096
5099	DURABLE GOODS, NEC
51	WHOLESALE TRADE-NONDURABLE GOODS
511	PAPER AND PAPER PRODUCTS
5111	PRINTING AND WRITING PAPER
5112	STATIONERY SUPPLIES
5113	INDUSTRIAL & PERSONAL SERVICE PAPER
512	DRUGS, PROPRIETARIES, AND SUNDRIES
5122	DRUGS, PROPRIETARIES, AND SUNDRIES
513	APPAREL, PIECE GOODS AND NOTIONS
5133	PIECE GOODS
5134	NOTIONS AND OTHER DRY GOODS
5136	MEN'S CLOTHING AND FURNISHINGS
5137	WOMEN'S AND CHILDREN'S CLOTHING
5139	FOOTWEAR
514	GROCERIES AND RELATED PRODUCTS
5141	GROCERIES, GENERAL LINE
5142	FROZEN FOODS

APPENDIX E, (Continued)

SIC CODE	DESCRIPTION
5143	DAIRY PRODUCTS
5144	POULTRY AND POULTRY PRODUCTS
5145	CONFECTIONERY
5146	FISH AND SEAFOODS
5147	MEATS AND MEAT PRODUCTS
5148	FRESH FRUITS AND VEGETABLES
5149	GROCERIES AND RELATED PRODUCTS, NEC
515	FARM-PRODUCT RAW MATERIALS
5152	COTTON
5153	GRAIN
5154	LIVESTOCK
5159	FARM-PRODUCT RAW MATERIALS, NEC
516	CHEMICALS AND ALLIED PRODUCTS
5161	CHEMICALS AND ALLIED PRODUCTS
517	PETROLEUM AND PETROLEUM PRODUCTS
5171	PETROLEUM BULK STATIONS & TERMINALS
5172	PETROLEUM PRODUCTS, NEC
518	BEER, WINE, AND DISTILLED BEVERAGES
5181	BEER AND ALE
5182	WINES AND DISTILLED BEVERAGES
519	MISC. NONDURABLE GOODS
5191	FARM SUPPLIES
5194	TOBACCO AND TOBACCO PRODUCTS
5198	PAINTS, VARNISHES, AND SUPPLIES
5199	NONDURABLE GOODS, NEC
52	BUILDING MATERIALS & GARDEN SUPPLIES
521	LUMBER AND OTHER BUILDING MATERIALS
5211	LUMBER AND OTHER BUILDING MATERIALS
5212	SIC - 5212
523	PAINT, GLASS, AND WALLPAPER STORES
5231	PAINT, GLASS, AND WALLPAPER STORES
525	HARDWARE STORES
5251	HARDWARE STORES
526	RETAIL NURSERIES AND GARDEN STORES
5261	RETAIL NURSERIES AND GARDEN STORES
527	MOBILE HOME DEALERS
5271	MOBILE HOME DEALERS
53	GENERAL MERCHANDISE STORES
531	DEPARTMENT STORES
5311	DEPARTMENT STORES
533	VARIETY STORES
5331	VARIETY STORES
5341	SIC - 5341
539	MISC. GENERAL MERCHANDISE STORES
5399	MISC. GENERAL MERCHANDISE STORES
54	FOOD STORES
541	GROCERY STORES
5411	GROCERY STORES
542	MEAT MARKETS & FREEZER PROVISIONERS
5422	FREEZER AND LOCKER MEAT PROVISIONERS
5423	MEAT AND FISH (SEAFOOD) MARKETS
543	FRUIT STORES AND VEGETABLE MARKETS
5431	FRUIT STORES AND VEGETABLE MARKETS
544	CANDY, NUT, AND CONFECTIONERY STORES
5441	CANDY, NUT, AND CONFECTIONERY STORES
545	DAIRY PRODUCTS STORES
5451	DAIRY PRODUCTS STORES
546	RETAIL BAKERIES
5462	RETAIL BAKERIES-BAKING AND SELLING
5463	RETAIL BAKERIES-SELLING ONLY
549	MISCELLANEOUS FOOD STORES
5499	MISCELLANEOUS FOOD STORES
55	AUTOMOTIVE DEALERS & SERVICE STATIONS
551	NEW AND USED CAR DEALERS
5511	NEW AND USED CAR DEALERS
552	USED CAR DEALERS
5521	USED CAR DEALERS
553	AUTO AND HOME SUPPLY STORES
5531	AUTO AND HOME SUPPLY STORES
554	GASOLINE SERVICE STATIONS
5541	GASOLINE SERVICE STATIONS
555	BOAT DEALERS
5551	BOAT DEALERS
556	RECREATION & UTILITY TRAILER DEALERS
5561	RECREATION & UTILITY TRAILER DEALERS
557	MOTORCYCLE DEALERS
5571	MOTORCYCLE DEALERS
559	AUTOMOTIVE DEALERS, NEC
5599	AUTOMOTIVE DEALERS, NEC
56	APPAREL AND ACCESSORY STORES
561	MEN'S & BOYS' CLOTHING & FURNISHINGS
5611	MEN'S & BOYS' CLOTHING & FURNISHINGS
562	WOMEN'S READY-TO-WEAR STORES
5621	WOMEN'S READY-TO-WEAR STORES
563	WOMEN'S ACCESSORY & SPECIALTY STORES
5631	WOMEN'S ACCESSORY & SPECIALTY STORES
564	CHILDREN'S AND INFANTS' WEAR STORES
5641	CHILDREN'S AND INFANTS' WEAR STORES
565	FAMILY CLOTHING STORES
5651	FAMILY CLOTHING STORES
566	SHOE STORES
5661	SHOE STORES
568	FURRIERS AND FUR SHOPS
5681	FURRIERS AND FUR SHOPS
569	MISCELLANEOUS APPAREL & ACCESSORIES
5699	MISCELLANEOUS APPAREL & ACCESSORIES
57	FURNITURE AND HOME FURNISHINGS STORES
571	FURNITURE AND HOME FURNISHINGS STORES
5710	FURNITURE AND HOME FURNISHINGS STORES
5712	FURNITURE STORES
5713	FLOOR COVERING STORES
5714	DRAPERY AND UPHOLSTERY STORES
5719	MISC. HOME FURNISHINGS STORES
572	HOUSEHOLD APPLIANCE STORES
5722	HOUSEHOLD APPLIANCE STORES
573	RADIO, TELEVISION, AND MUSIC STORES
5732	RADIO AND TELEVISION STORES
5733	MUSIC STORES
58	EATING AND DRINKING PLACES
581	EATING AND DRINKING PLACES
5812	EATING PLACES
5813	DRINKING PLACES
59	MISCELLANEOUS RETAIL
591	DRUG STORES AND PROPRIETARY STORES
5912	DRUG STORES AND PROPRIETARY STORES
592	LIQUOR STORES
5921	LIQUOR STORES
593	USED MERCHANDISE STORES
5931	USED MERCHANDISE STORES
594	MISCELLANEOUS SHOPPING GOODS STORES
5941	SPORTING GOODS AND BICYCLE SHOPS
5942	BOOK STORES
5943	STATIONERY STORES
5944	JEWELRY STORES
5945	HOBBY, TOY, AND GAME SHOPS
5946	CAMERA & PHOTOGRAPHIC SUPPLY STORES
5947	GIFT, NOVELTY, AND SOUVENIR SHOPS
5948	LUGGAGE AND LEATHER GOODS STORES
5949	SEWING, NEEDLEWORK, AND PIECE GOODS
596	NONSTORE RETAILERS
5961	MAIL ORDER HOUSES
5962	MERCHANDISING MACHINE OPERATORS
5963	DIRECT SELLING ORGANIZATIONS
598	FUEL AND ICE DEALERS
5982	FUEL AND ICE DEALERS, NEC
5983	FUEL OIL DEALERS
5984	LIQUIFIED PETROLEUM GAS DEALERS
599	RETAIL STORES, NEC
5992	FLORISTS
5993	CIGAR STORES AND STANDS
5994	NEWS DEALERS AND NEWSSTANDS
5999	MISCELLANEOUS RETAIL STORES, NEC
60	BANKING
601	FEDERAL RESERVE BANKS
6011	FEDERAL RESERVE BANKS
602	COMMERCIAL AND STOCK SAVINGS BANKS
6022	STATE BANKS, FEDERAL RESERVE
6023	STATE BANKS, NOT FED. RESERVE, FDIC
6024	STATE BANKS, NOT FED. RES., NOT FDIC
6025	NATIONAL BANKS, FEDERAL RESERVE
6026	NATIONAL BANKS, NOT FED. RES., FDIC
6027	NATIONAL BANKS, NOT FDIC
6028	PRIVATE BANKS, NOT INCORP., NOT FDIC
603	MUTUAL SAVINGS BANKS
6032	MUTUAL SAVINGS BANKS, FED. RESERVE
6033	MUTUAL SAVINGS BANKS, NEC

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
6034	MUTUAL SAVINGS BANKS, NOT FDIC
604	TRUST COMPANIES, NONDEPOSIT
6042	NONDEPOSIT TRUSTS, FEDERAL RESERVE
6044	NONDEPOSIT TRUSTS, NOT FDIC
605	FUNCTIONS CLOSELY RELATED TO BANKING
6052	FOREIGN EXCHANGE ESTABLISHMENTS
6054	SAFE DEPOSIT COMPANIES
6055	CLEARINGHOUSE ASSOCIATIONS
6056	CORPORATIONS FOR BANKING ABROAD
6059	FUNCTIONS RELATED TO BANKING, NEC
61	CREDIT AGENCIES OTHER THAN BANKS
611	REDISCOUNT AND FINANCING INSTITUTIONS
6112	REDISCOUNTING, NOT FOR AGRICULTURAL
6113	REDISCOUNTING, FOR AGRICULTURAL
612	SAVINGS AND LOAN ASSOCIATIONS
6122	FEDERAL SAVINGS & LOAN ASSOCIATIONS
6123	STATE ASSOCIATIONS, INSURED
6124	STATE ASSOCIATIONS, NONINSURED, FHLB
6125	STATE ASSOCIATIONS, NONINSURED, NEC
613	AGRICULTURAL CREDIT INSTITUTIONS
6131	AGRICULTURAL CREDIT INSTITUTIONS
614	PERSONAL CREDIT INSTITUTIONS
6142	FEDERAL CREDIT UNIONS
6143	STATE CREDIT UNIONS
6144	NONDEPOSIT INDUSTRIAL LOAN COMPANIES
6145	LICENSED SMALL LOAN LENDERS
6146	INSTALLMENT SALES FINANCE COMPANIES
6149	MISC. PERSONAL CREDIT INSTITUTIONS
615	BUSINESS CREDIT INSTITUTIONS
6153	SHORT-TERM BUSINESS CREDIT
6159	MISC. BUSINESS CREDIT INSTITUTIONS
616	MORTGAGE BANKERS AND BROKERS
6162	MORTGAGE BANKERS AND CORRESPONDENTS
6163	LOAN BROKERS
62	SECURITY, COMMODITY BROKERS & SERVICES
621	SECURITY BROKERS AND DEALERS
6211	SECURITY BROKERS AND DEALERS
622	COMMODITY CONTRACTS BROKERS, DEALERS
6221	COMMODITY CONTRACTS BROKERS, DEALERS
623	SECURITY AND COMMODITY EXCHANGES
6231	SECURITY AND COMMODITY EXCHANGES
628	SECURITY AND COMMODITY SERVICES
6281	SECURITY AND COMMODITY SERVICES
63	INSURANCE CARRIERS
631	LIFE INSURANCE
6311	LIFE INSURANCE
632	MEDICAL SERVICE AND HEALTH INSURANCE
6321	ACCIDENT AND HEALTH INSURANCE
6324	HOSPITAL AND MEDICAL SERVICE PLANS
633	FIRE, MARINE, AND CASUALTY INSURANCE
6331	FIRE, MARINE, AND CASUALTY INSURANCE
635	SURETY INSURANCE

SIC CODE	DESCRIPTION
6351	SURETY INSURANCE
636	TITLE INSURANCE
6361	TITLE INSURANCE
6362	SIC - 6362
637	PENSION, HEALTH, AND WELFARE FUNDS
6371	PENSION, HEALTH, AND WELFARE FUNDS
639	INSURANCE CARRIERS, NEC
6399	INSURANCE CARRIERS, NEC
64	INSURANCE AGENTS, BROKERS, & SERVICE
641	INSURANCE AGENTS, BROKERS, & SERVICE
6411	INSURANCE AGENTS, BROKERS, & SERVICE
6499	SIC - 6499
65	REAL ESTATE
651	REAL ESTATE OPERATORS AND LESSORS
6512	NONRESIDENTIAL BUILDING OPERATORS
6513	APARTMENT BUILDING OPERATORS
6514	DWELLING OPERATORS, EXC. APARTMENTS
6515	MOBILE HOME SITE OPERATORS
6517	RAILROAD PROPERTY LESSORS
6519	REAL PROPERTY LESSORS, NEC
653	REAL ESTATE AGENTS AND MANAGERS
6531	REAL ESTATE AGENTS AND MANAGERS
654	TITLE ABSTRACT OFFICES
6541	TITLE ABSTRACT OFFICES
655	SUBDIVIDERS AND DEVELOPERS
6552	SUBDIVIDERS AND DEVELOPERS, NEC
6553	CEMETERY SUBDIVIDERS AND DEVELOPERS
66	COMBINED REAL ESTATE, INSURANCE, ETC
661	COMBINED REAL ESTATE, INSURANCE, ETC
6611	COMBINED REAL ESTATE, INSURANCE, ETC
67	HOLDING AND OTHER INVESTMENT OFFICES
671	HOLDING OFFICES
6711	HOLDING OFFICES
672	INVESTMENT OFFICES
6722	MANAGEMENT INVESTMENT, OPEN-END
6723	MANAGEMENT INVESTMENT, CLOSED-END
6724	UNIT INVESTMENT TRUSTS
6725	FACE-AMOUNT CERTIFICATE OFFICES
673	TRUSTS
6732	EDUCATIONAL, RELIGIOUS, ETC. TRUSTS
6733	TRUSTS, NEC
679	MISCELLANEOUS INVESTING
6792	OIL ROYALTY TRADERS
6793	COMMODITY TRADERS
6794	PATENT OWNERS AND LESSORS
6798	REAL ESTATE INVESTMENT TRUSTS
6799	INVESTORS, NEC
70	HOTELS AND OTHER LODGING PLACES
701	HOTELS, MOTELS, AND TOURIST COURTS
7011	HOTELS, MOTELS, AND TOURIST COURTS
7013	SIC - 7013
702	ROOMING AND BOARDING HOUSES

SIC CODE	DESCRIPTION
7021	ROOMING AND BOARDING HOUSES
703	CAMPS AND TRAILERING PARKS
7032	SPORTING AND RECREATIONAL CAMPS
7033	TRAILERING PARKS FOR TRANSIENTS
704	MEMBERSHIP-BASIS ORGANIZATION HOTELS
7041	MEMBERSHIP-BASIS ORGANIZATION HOTELS
7051	SIC - 7051
72	PERSONAL SERVICES
721	LAUNDRY, CLEANING, & GARMENT SERVICES
7210	LAUNDRY, CLEANING, & GARMENT SERVICES
7211	POWER LAUNDRIES, FAMILY & COMMERCIAL
7212	GARMENT PRESSING & CLEANERS' AGENTS
7213	LINEN SUPPLY
7214	DIAPER SERVICE
7215	COIN-OPERATED LAUNDRIES AND CLEANING
7216	DRY CLEANING PLANTS, EXCEPT RUG
7217	CARPET AND UPHOLSTERY CLEANING
7218	INDUSTRIAL LAUNDERERS
7219	LAUNDRY AND GARMENT SERVICES, NEC
722	PHOTOGRAPHIC STUDIOS, PORTRAIT
7221	PHOTOGRAPHIC STUDIOS, PORTRAIT
723	BEAUTY SHOPS
7231	BEAUTY SHOPS
724	BARBER SHOPS
7241	BARBER SHOPS
725	SHOE REPAIR AND HAT CLEANING SHOPS
7251	SHOE REPAIR AND HAT CLEANING SHOPS
726	FUNERAL SERVICE AND CREMATORIES
7261	FUNERAL SERVICE AND CREMATORIES
729	MISCELLANEOUS PERSONAL SERVICES
7291	SIC - 7291
7299	MISCELLANEOUS PERSONAL SERVICES
73	BUSINESS SERVICES
731	ADVERTISING
7311	ADVERTISING AGENCIES
7312	OUTDOOR ADVERTISING SERVICES
7313	RADIO, TV, PUBLISHER REPRESENTATIVES
7319	ADVERTISING, NEC
732	CREDIT REPORTING AND COLLECTION
7321	CREDIT REPORTING AND COLLECTION
733	MAILING, REPRODUCTION, STENOGRAPHIC
7330	MAILING, REPRODUCTION, STENOGRAPHIC
7331	DIRECT MAIL ADVERTISING SERVICES
7332	BLUEPRINTING AND PHOTOCOPYING
7333	COMMERCIAL PHOTOGRAPHY AND ART
7339	STENOGRAPHIC AND REPRODUCTION, NEC
734	SERVICES TO BUILDINGS
7341	WINDOW CLEANING
7342	DISINFECTING AND EXTERMINATING
7349	BUILDING MAINTENANCE SERVICES, NEC
735	NEWS SYNDICATES
7351	NEWS SYNDICATES

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION
736	PERSONNEL SUPPLY SERVICES
7361	EMPLOYMENT AGENCIES
7362	TEMPORARY HELP SUPPLY SERVICES
7369	PERSONNEL SUPPLY SERVICES, NEC
737	COMPUTER AND DATA PROCESSING SERVICES
7372	COMPUTER PROGRAMMING AND SOFTWARE
7374	DATA PROCESSING SERVICES
7379	COMPUTER RELATED SERVICES, NEC
739	MISCELLANEOUS BUSINESS SERVICES
7391	RESEARCH & DEVELOPMENT LABORATORIES
7392	MANAGEMENT AND PUBLIC RELATIONS
7393	DETECTIVE AND PROTECTIVE SERVICES
7394	EQUIPMENT RENTAL AND LEASING
7395	PHOTOFINISHING LABORATORIES
7396	TRADING STAMP SERVICES
7397	COMMERCIAL TESTING LABORATORIES
7399	BUSINESS SERVICES, NEC
7461	SIC - 7461
7499	SIC - 7499
75	AUTO REPAIR, SERVICES, AND GARAGES
751	AUTOMOTIVE RENTALS, WITHOUT DRIVERS
7511	SIC - 7511
7512	PASSENGER CAR RENTAL AND LEASING
7513	TRUCK RENTAL AND LEASING
7519	UTILITY TRAILER RENTAL
752	AUTOMOBILE PARKING
7523	PARKING LOTS
7525	PARKING STRUCTURES
753	AUTOMOTIVE REPAIR SHOPS
7530	AUTOMOTIVE REPAIR SHOPS
7531	TOP AND BODY REPAIR SHOPS
7534	TIRE RETREADING AND REPAIR SHOPS
7535	PAINT SHOPS
7538	GENERAL AUTOMOTIVE REPAIR SHOPS
7539	AUTOMOTIVE REPAIR SHOPS, NEC
754	AUTOMOTIVE SERVICES, EXCEPT REPAIR
7541	SIC - 7541
7542	CAR WASHES
7549	AUTOMOTIVE SERVICES, NEC
76	MISCELLANEOUS REPAIR SERVICES
762	ELECTRICAL REPAIR SHOPS
7622	RADIO AND TELEVISION REPAIR
7623	REFRIGERATION SERVICE AND REPAIR
7629	ELECTRICAL REPAIR SHOPS, NEC
763	WATCH, CLOCK, AND JEWELRY REPAIR
7631	WATCH, CLOCK, AND JEWELRY REPAIR
764	REUPHOLSTERY AND FURNITURE REPAIR
7641	REUPHOLSTERY AND FURNITURE REPAIR
769	MISCELLANEOUS REPAIR SHOPS
7692	WELDING REPAIR
7694	ARMATURE REWINDING SHOPS
7699	REPAIR SERVICES, NEC

SIC CODE	DESCRIPTION
7716	SIC - 7716
78	MOTION PICTURES
781	MOTION PICTURE PRODUCTION & SERVICES
7813	MOTION PICTURE PRODUCTION, EXCEPT TV
7814	MOTION PICTURE PRODUCTION FOR TV
7819	SERVICES ALLIED TO MOTION PICTURES
782	MOTION PICTURE DISTRIBUTION & SERVICES
7823	MOTION PICTURE FILM EXCHANGES
7824	FILM OR TAPE DISTRIBUTION FOR TV
7829	MOTION PICTURE DISTRIBUTION SERVICES
783	MOTION PICTURE THEATERS
7832	MOTION PICTURE THEATERS, EX DRIVE-IN
7833	DRIVE-IN MOTION PICTURE THEATERS
7869	SIC - 7869
79	AMUSEMENT & RECREATION SERVICES, NEC
791	DANCE HALLS, STUDIOS, AND SCHOOLS
7911	DANCE HALLS, STUDIOS, AND SCHOOLS
792	PRODUCERS, ORCHESTRAS, ENTERTAINERS
7922	THEATRICAL PRODUCERS AND SERVICES
7929	ENTERTAINERS & ENTERTAINMENT GROUPS
793	BOWLING AND BILLIARD ESTABLISHMENTS
7932	BILLIARD AND POOL ESTABLISHMENTS
7933	BOWLING ALLEYS
794	COMMERCIAL SPORTS
7941	SPORTS CLUBS, MANAGERS, & PROMOTERS
7948	RACING, INCLUDING TRACK OPERATION
799	MISC. AMUSEMENT, RECREATIONAL SERVICES
7992	PUBLIC GOLF COURSES
7993	COIN-OPERATED AMUSEMENT DEVICES
7996	AMUSEMENT PARKS
7997	MEMBERSHIP SPORTS & RECREATION CLUBS
7999	AMUSEMENT AND RECREATION, NEC
80	HEALTH SERVICES
801	OFFICES OF PHYSICIANS
8011	OFFICES OF PHYSICIANS
802	OFFICES OF DENTISTS
8021	OFFICES OF DENTISTS
803	OFFICES OF OSTEOPATHIC PHYSICIANS
8031	OFFICES OF OSTEOPATHIC PHYSICIANS
804	OFFICES OF OTHER HEALTH PRACTITIONERS
8041	OFFICES OF CHIROPRACTORS
8042	OFFICES OF OPTOMETRISTS
8049	OFFICES OF HEALTH PRACTITIONERS, NEC
805	NURSING AND PERSONAL CARE FACILITIES
8051	SKILLED NURSING CARE FACILITIES
8059	NURSING AND PERSONAL CARE, NEC
806	HOSPITALS
8060	SIC - 8060 HOSPITALS
8061	SIC - 8061
8062	GENERAL MEDICAL & SURGICAL HOSPITALS
8063	PSYCHIATRIC HOSPITALS
8069	SPECIALTY HOSPITALS, EXC PSYCHIATRIC

SIC CODE	DESCRIPTION
807	MEDICAL AND DENTAL LABORATORIES
8071	MEDICAL LABORATORIES
8072	DENTAL LABORATORIES
808	OUTPATIENT CARE FACILITIES
8081	OUTPATIENT CARE FACILITIES
809	HEALTH AND ALLIED SERVICES, NEC
8091	HEALTH AND ALLIED SERVICES, NEC
81	LEGAL SERVICES
811	LEGAL SERVICES
8111	LEGAL SERVICES
82	EDUCATIONAL SERVICES
821	ELEMENTARY AND SECONDARY SCHOOLS
8211	ELEMENTARY AND SECONDARY SCHOOLS
822	COLLEGES AND UNIVERSITIES
8220	COLLEGES AND UNIVERSITIES
8221	COLLEGES AND UNIVERSITIES, NEC
8222	JUNIOR COLLEGES
823	LIBRARIES AND INFORMATION CENTERS
8231	LIBRARIES AND INFORMATION CENTERS
824	CORRESPONDENCE AND VOCATIONAL SCHOOLS
8241	CORRESPONDENCE SCHOOLS
8243	DATA PROCESSING SCHOOLS
8244	BUSINESS AND SECRETARIAL SCHOOLS
8249	VOCATIONAL SCHOOLS, NEC
829	SCHOOLS & EDUCATIONAL SERVICES, NEC
8299	SCHOOLS & EDUCATIONAL SERVICES, NEC
83	SOCIAL SERVICES
832	INDIVIDUAL AND FAMILY SERVICES
8321	INDIVIDUAL AND FAMILY SERVICES
833	JOB TRAINING AND RELATED SERVICES
8331	JOB TRAINING AND RELATED SERVICES
835	CHILD DAY CARE SERVICES
8351	CHILD DAY CARE SERVICES
836	RESIDENTIAL CARE
8361	RESIDENTIAL CARE
839	SOCIAL SERVICES, NEC
8399	SOCIAL SERVICES, NEC
84	MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS
841	MUSEUMS AND ART GALLERIES
8411	MUSEUMS AND ART GALLERIES
842	BOTANICAL AND ZOOLOGICAL GARDENS
8421	BOTANICAL AND ZOOLOGICAL GARDENS
86	MEMBERSHIP ORGANIZATIONS
861	BUSINESS ASSOCIATIONS
8611	BUSINESS ASSOCIATIONS
862	PROFESSIONAL ORGANIZATIONS
8621	PROFESSIONAL ORGANIZATIONS
863	LABOR ORGANIZATIONS
8631	LABOR ORGANIZATIONS
864	CIVIC AND SOCIAL ASSOCIATIONS
8641	CIVIC AND SOCIAL ASSOCIATIONS
865	POLITICAL ORGANIZATIONS

SIC CODE	DESCRIPTION
8651	POLITICAL ORGANIZATIONS
866	RELIGIOUS ORGANIZATIONS
8661	RELIGIOUS ORGANIZATIONS
869	MEMBERSHIP ORGANIZATIONS, NEC
8699	MEMBERSHIP ORGANIZATIONS, NEC
88	PRIVATE HOUSEHOLDS
881	PRIVATE HOUSEHOLDS
8811	PRIVATE HOUSEHOLDS
89	MISCELLANEOUS SERVICES
891	ENGINEERING & ARCHITECTURAL SERVICES
8910	ENGINEERING & ARCHITECTURAL SERVICES
8911	ENGINEERING & ARCHITECTURAL SERVICES
892	NONCOMMERCIAL RESEARCH ORGANIZATIONS
8922	NONCOMMERCIAL RESEARCH ORGANIZATIONS
893	ACCOUNTING, AUDITING, & BOOKKEEPING
8931	ACCOUNTING, AUDITING, & BOOKKEEPING
899	SERVICES, NEC
8999	SERVICES, NEC
91	EXECUTIVE, LEGISLATIVE, AND GENERAL
911	EXECUTIVE OFFICES
9111	EXECUTIVE OFFICES
912	LEGISLATIVE BODIES
9121	LEGISLATIVE BODIES
913	EXECUTIVE AND LEGISLATIVE COMBINED
9131	EXECUTIVE AND LEGISLATIVE COMBINED
9189	SIC - 9189
919	GENERAL GOVERNMENT, NEC
9199	GENERAL GOVERNMENT, NEC
92	JUSTICE, PUBLIC ORDER, AND SAFETY
921	COURTS
9211	COURTS
922	PUBLIC ORDER AND SAFETY
9221	POLICE PROTECTION
9222	LEGAL COUNSEL AND PROSECUTION
9223	CORRECTIONAL INSTITUTIONS
9224	FIRE PROTECTION
9229	PUBLIC ORDER AND SAFETY, NEC
93	FINANCE, TAXATION, & MONETARY POLICY
931	FINANCE, TAXATION, & MONETARY POLICY
9311	FINANCE, TAXATION, & MONETARY POLICY
9349	SIC - 9349
94	ADMINISTRATION OF HUMAN RESOURCES
941	ADMIN. OF EDUCATIONAL PROGRAMS
9411	ADMIN. OF EDUCATIONAL PROGRAMS
943	ADMIN. OF PUBLIC HEALTH PROGRAMS
9431	ADMIN. OF PUBLIC HEALTH PROGRAMS
944	ADMIN. OF SOCIAL & MANPOWER PROGRAMS
9441	ADMIN. OF SOCIAL & MANPOWER PROGRAMS
945	ADMINISTRATION OF VETERANS' AFFAIRS
9451	ADMINISTRATION OF VETERANS' AFFAIRS
95	ENVIRONMENTAL QUALITY AND HOUSING
951	ENVIRONMENTAL QUALITY
9511	AIR, WATER & SOLID WASTE MANAGEMENT
9512	LAND, MINERAL, WILDLIFE CONSERVATION
953	HOUSING AND URBAN DEVELOPMENT
9531	HOUSING PROGRAMS
9532	URBAN AND COMMUNITY DEVELOPMENT
96	ADMINISTRATION OF ECONOMIC PROGRAMS
961	ADMIN. OF GENERAL ECONOMIC PROGRAMS
9611	ADMIN. OF GENERAL ECONOMIC PROGRAMS
962	REGULATION, ADMIN. OF TRANSPORTATION
9621	REGULATION, ADMIN. OF TRANSPORTATION
963	REGULATION, ADMIN. OF UTILITIES
9631	REGULATION, ADMIN. OF UTILITIES
964	REGULATION OF AGRICULTURAL MARKETING
9641	REGULATION OF AGRICULTURAL MARKETING
965	REGULATION MISC. COMMERCIAL SECTORS
9651	REGULATION MISC. COMMERCIAL SECTORS
966	SPACE RESEARCH AND TECHNOLOGY
9661	SPACE RESEARCH AND TECHNOLOGY
97	NATIONAL SECURITY AND INTL. AFFAIRS
971	NATIONAL SECURITY
9711	NATIONAL SECURITY
972	INTERNATIONAL AFFAIRS
9721	INTERNATIONAL AFFAIRS
99	NONCLASSIFIABLE ESTABLISHMENTS
999	NONCLASSIFIABLE ESTABLISHMENTS
9999	NONCLASSIFIABLE ESTABLISHMENTS